

# THE VALLEY FARMER.

A Monthly Journal of Agriculture, Horticulture, Education and Domestic Economy, Adapted  
To the Wants of the People of the Mississippi Valley.

VOL. VI.

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NO. 9.

## The Valley Farmer.

**WOODWARD & ABBOTT, PUBLISHERS.**  
Office, corner Fourth and Chestnut streets.  
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### TERMS.

THE VALLEY FARMER is published on the first of each month, each number containing 48 large octavo pages (including 8 pages devoted to advertisements of matters of interest to farmers,) and is offered at the following rates:—

Single copy, one year, - - - - \$1 00

Four copies, \$3; seven copies, \$5; Fifteen copies, \$10.

Payments, in all cases, must be made in advance.

Remittances in gold coins, current bank notes, or postage stamps, may be made by mail at our risk.

AGENTS.—Postmasters and Merchants throughout the country are authorized to act as Agents, and every friend of the enterprise is respectfully requested to aid in extending its circulation.

ADVERTISING.—Advertisements are inserted in the ADVERTISING DEPARTMENT of the Valley Farmer at the following rates:—One insertion of 12 lines, \$1; each additional insertion, 50 cents; 12 lines one year \$6; each additional 12 lines one year, \$4; one page, one insertion, \$7, each additional insertion, \$5; one page, yearly, \$60; Cards of six lines or less, one year, \$5.

### The Fairs.

Before another number of our paper shall reach its readers, these interesting annual gatherings will have commenced. Our necessary trip to the East will prevent us from attending as many of these joyful reunions as we could desire, but we hope to return in season to attend our State Fair and as also some of the county fairs. We hope our friends will improve the opportunities thus offered to recommend the Valley

Farmer to their brother farmers. We trust we shall not be transcending our duties if we make a few suggestions touching the management of these fairs, for the consideration of those having charge of them.

In the first place greater attention should be paid to the comfort of the guests. At some of the fairs which we attended last fall, it appeared as though the welfare of the thousands assembled had not been thought of, and thus many after walking around and standing about until fatigue had driven away all interest, went home dissatisfied and disgusted. This was particularly the case at the Illinois State Fair, where not a single seat was provided for the ladies who assembled in such throngs at the fair grounds.

An ample amphitheatre should be constructed, with seats to accommodate all who assemble; and within this amphitheatre all the public ceremonies should be held. Ample supplies of good water should also be provided that the guests may not be obliged to leave the grounds to quench their thirst, or resort to the refreshment stands unless they choose to do so.

And not only is the comfort of the people to be consulted, but their edification also. The people wish to know what is going on, and for that reason should be informed of the decisions of the judges as soon as such decisions are made.

We noticed last year that there was almost every fair we attended too much time lost in the exhibition of stock in waiting for the arrival of the animals in the ring. A good way to remedy this will be for two

marshalls to be appointed to each committee; one to collect the committee and have it on the ground promptly, the other to collect the stock and have it ready. Then while the committee attended by one marshal is examining one class, the other marshal will collect and have the next class ready to enter the ring just as soon as the former leaves it. In this way all the time will be occupied, the interest kept up, and the day's work got through with in good season, and time allowed for such social enjoyments and festive entertainments as may be desired.

As far as possible every point of difference likely to arise should be definitely settled before hand by the Directors. Points of dispute or disagreement are constantly arising between one committee man and another and between committees and exhibitors, all these should be settled as far as they can be foreseen, and most of them can be foreseen before hand, that there need be no delays on that score. Particular and definite instructions should be given to judges, and as few things as possible left discretionary with them, and the same rules and principles as far as possible should be observed by the judges of all the articles.

Greater care should be taken to prevent the owners of stock and manufactured articles from holding intercourse with the judges, and attempting to influence them. We have been disgusted sometimes to see how officious exhibitors sometimes inform the judges of the good qualities of their favorite animal, for this purpose intruding themselves into the ring against the rules of the exhibition. The rules on this subject should be strictly enforced, and no one, not even the members of the Directory should be allowed to speak to the judges while on duty. If they wish for instruction they should receive it through their marshal.

#### The ——— State Fair.

Our good friend, Dr. Kennicott, writes for the *Prairie Farmer* the following article in reference to the Illinois State Fair. His remarks are so true, so just, so well

timed, and so well adapted, without any "variation" to our own State, and every State, that we insert them under the above caption, that all our readers in every State may make a self application of them:

**OUR SECOND STATE FAIR.**—Are our readers, and particularly those of Central Illinois mindful of the coming State Fair. We hope so, and trust that they have not neglected to make preparations for a more creditable and instructive display of Horticultural, and general farm products, than at our first one.

So far as the lateness of the season permitted, the region round about Springfield furnished forth a glorious display of fruits, in October 1853. But there our self gratulation ends. Empty tables stared us in the face, where we looked for beautiful flowers, choice vegetables, household and dairy products, and the thousand and one things, of home growth, or home manufacture, which ought to have been there, and were not. Noble exceptions there were; and yet only exceptions.

But we are bound to have a different state of things, at Springfield in September 1854. It was a new thing last autumn, and the people had not learned that these great State Institutions are not mere "cattle shows," nor yet a field for curious display, or mercantile advertisements, in any legitimate sense, but a SCHOOL OF AGRICULTURE AND KINDRED ARTS, where every visitor is expected to bring something to the general stock of subjects for demonstration, and to give as well as to receive instruction.

There is no useful beautiful thing—the product of home labor, or home soil—that should not find a place at these home Fairs. And above all, the farmers and mechanics, within a reasonable distance, should be there with their families, and products too. It is a normal school, and annual jubilee, and should be attended as a sacred obligation.

But we are going beyond the mark. Horticulture is our official specialty: and we commenced writing with a design to appeal to the cultivators of old Sangamon and adjoining counties, in the matter of Horticultural display, at the coming State Fair.

It was too late last season, for you to show flowers or the earlier perishable fruits but no one need say, that the cultivators of the best soil, in the best climate of Illinois, could not show a wheelbarrow load of field and garden vegetables. And, be it known, that nice vegetables rank next to fruits, as human food, and some sorts ahead of grains, in keeping domestic animals. Let us see samples of them, and tell us of the yield, and tell us of your management in cultivation.

The lateness of the season will be no excuse this year, should Floral Hall be as barren as last: and instead of two or three gardens, and green houses, we count on two or three hundred, being represented at our next State Fair.

Now one suggestion as to fruit. This is not a general fruit season, nor do we look for the grand display of last year, but there are always some specimens worth showing, and if every person who has fruit, will bring a few we will have a large show. Remember that we wish *natural* specimens—not monsters—best sorts, or good and profitable, or new and rare, rather than large and showy ones. We do not ask you to excite our wonder, but rather enlighten us, in regard to that which is most desirable and useful. Bring us therefore the best ordinary specimens of the usual size and color—and give us local name and history, and comparative productiveness, hardiness &c., &c. The day of "Monstrous Pippins" has gone by; and UTILITY, rather than show, governs the present.

J. A. K.

#### American Pomological Society.

This Society holds its annual meeting at Boston in September next. It is anticipated that it will be one of the most interesting meetings of the kind ever held in this country. Fruit growers with specimens of their fruits will be in attendance from various States. The object of the Society is to ascertain what fruits are best adapted to the different localities of the Union; to make selections of those deemed the best and to discard the poorer sorts—to diffuse information as to the best modes of culture, and the most suitable soils and situations.

With the view of promoting these objects Committees are appointed in the different States, whose business it is to collect information from their respective States, to reduce it to form, and to make report to the Society. The Chairman of the Committee for the State of Missouri, is THOMAS ALLEN, who has power to fill vacancies in his Committee. The Committee for this State consists of the following named gentlemen.—Thomas Allen and Ephraim Abbott, of St. Louis; A. W. Simpson, of Boonville, and Julius Mallinckrodt, Augusta, St. Charles county.

The attention of this Committee is directed to ascertaining what are the best fruits

successfully grown in this State, what varieties are worthless after trial? what are the diseases to which fruits are subject? &c.

To arrive at uniformity in the reports, the following form is used as showing the comparative degrees of merit in classifying the different varieties, for example:

	GOOD.	VERY GOOD.	BEST.
Pears	Napoleon	Hartlett	Seckel
Plums	Lombard	Washington	Green Gage
Peaches	Crawford Late	Old Mixon free	George IV.

Fruits following below the rank *good* except culinary sorts, are deemed unworthy of cultivation.

Specimens of fruits, with remarks on their cultivation, and lists of approved varieties, are respectfully solicited. Fruits of doubtful names or origin may be forwarded for examination.

#### North-western Pomological Convention.

The next annual meeting of this Association will be held at Burlington, Iowa, commencing on the last Tuesday, (26th of Sept.) at 10 o'clock, A. M., and continuing four days. Then "come one, come all" interested in fruit and fruit trees!

Communications on any or all branches of Horticulture solicited, which together with any boxes of specimens may be directed to "N. W. Pomological Convention, Care of Messrs. Avery, Burlington, Iowa."

Editors friendly to the cause are respectfully requested to copy this and notice editorially.

By order

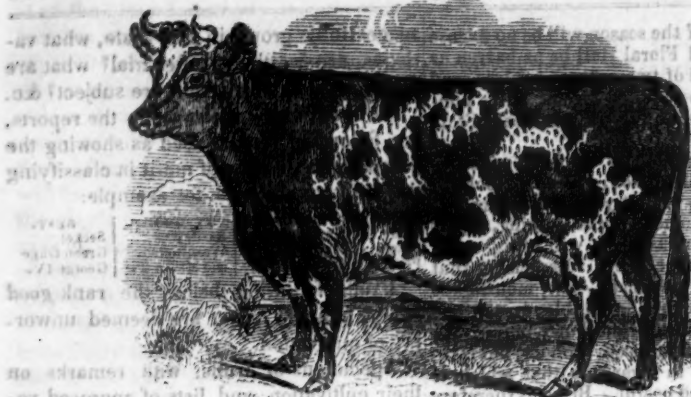
J. K. PHENIX, Cors. Sec.

PENNOCK'S GRAIN PLANTER.—We have one of these machines at our office for the examination and inspection of those interested, and we invite wheat growers to read the advertisement in this number and also the letter of Judge Jackson in the August number in relation to its merits. There is no doubt there are three important advantages gained by the use of this machine of the common method of sowing:

A saving of seed,

A saving of labor,

An increased quantity of grain.



AYERSHIRE COW: but often found an every day—white has

### The Breeds of Cattle—No. 5.

#### THE AYERSHIRE.

From Youatt and Martin.

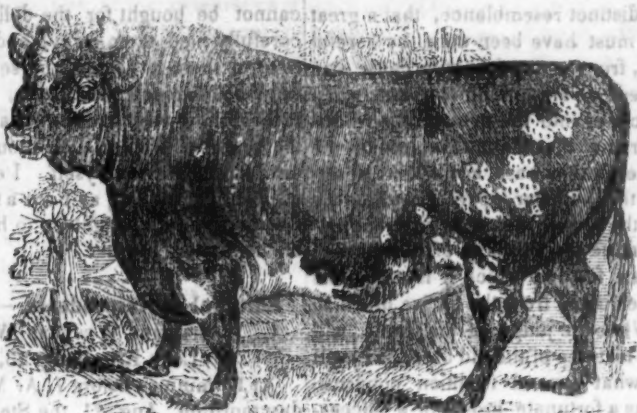
Mr. Aiton in his "Treatise on the Dairy Breed of Cows," thus describes the Ayershire cattle;—"The shapes most approved of, are—head small but rather long and narrow at the muzzle; the eye small, but smart and lively, the horns small, clear, crooked, and their roots at considerable distance from each other, neck long and slender, tapering toward the head, with no loose skin below; shoulders thin; fore-quarters light; hind-quarters large: back straight, broad behind, the joints rather loose and open; carcass deep, and pelvis capacious, and wide over the hips, with round fleshy buttocks; tail long and small; legs small and short with firm joints; udder capacious, broad and square; stretching forward and neither fleshy, low hung, nor loose; the milk veins large and prominent teats short, all pointing outward, and at considerable distance from each other; skin thin and loose; hair soft and wooly. The head, bones, horns, and all parts of least value, small; and the general figure compact and well proportioned." Mr. Rankine very properly remarks, that "compared with other improved breeds, the thighs, or what is called the twist of

the Ayershire cow, are thin. "She is characteristically not a fleshy animal."

The Ayershire farmers prefer their dairy bulls, according to the feminine aspect of their heads and necks; and wish them not round behind, but broad at the hook-bones and hips, and full in the flanks. Experience, dearly bought, led to this, for the consequence of the crossing of the small native breeds with the heavy cattle imported from the south, was a bony, ill-shaped animal, not much improved as a milker, and its disposition to fat lamentably decreased; it may, however demand consideration whether the round and compact form of the West Highlander and the Galloway have not been too much sacrificed, and even the defects of the short-horn needlessly perpetuated.

Mr. Aiton says:—"The qualities of a cow are of great importance. Tameness and docility of temper greatly enhance the value of of milch cow. Some degree of hardiness, a sound constitution, and a moderate degree of life and spirit, are qualities to be wished for in a dairy cow, and what those of Ayershire generally possess. The most valuable quality which a dairy cow can possess is, that she yields much milk, and that of an oily, or butyric, or caseous nature, and that after she has yielded very large quantities of milk for several years, she shall be as val-





AYERSHIRE BULL.

uable for beef as any other breed of cows known; her fat shall be much more mixed through the whole flesh and she shall fatten faster than any other. This is high praise, if it can be truly affirmed of the Ayershire cattle; we are naturally anxious to know the origin, the history, and the general management of this valuable animal.

The origin of the Ayershire cow is even at the present day a matter of dispute; all that is certainly known is, that a century ago there was no such breed in Cunningham, or Ayershire or Scotland. Did the Ayershire cattle arise entirely from a careful selection of the best of the native breed?—if they did, it is a circumstance unparalleled in the history of agriculture. The native breed may be ameliorated by careful selection; its value may be incalculably increased—some good qualities—some of its best qualities—may be for the first time developed, but yet there will be some resemblance to the original stock, and the more we examine the animal, the more closely we can trace out the characteristic points of the ancestor, although every one of them improved.

Mr. Aiton gives the following description of the Ayershire cattle seventy years ago: "The cows kept in the district of Kyle and Cunningham were of a diminutive size, ill-

fed, ill shaped, and they yielded but a scanty return in milk; they were mostly of a black color, with large stripes of white along the chine or ridge of their backs; about the flanks and on their faces. Their horns were high and crooked, having deep ringlets at the root, the plainest proof that the cattle were but scantily fed; the chine of their backs stood up high and narrow: their sides were lank, short and thin; their hides thick and adhering to the bones; their pile was coarse and open; and few of them yielded more than six or eight quarts of milk per day, when in their best plight; or weighed, when fat, more than from twelve or sixteen to twenty stones averdupois, sinking offal." It was impossible that these cattle, fed as they then were, could be of great weight, well shaped, or yield much milk. Their only food in winter and spring was oat straw, and what they could pick up in the fields to which they were turned out almost every day, with a mash of a little corn with chaff daily for a few weeks after calving, and their pasture in summer was of the very worst quality; and that coarse pasture was so overstocked, and eaten so bare, that the cattle were half starved.

If Mr. Aiton's description of the present improved Ayershire is correct, the breed is very much changed, and yet there is so

much indistinct resemblance, that a great deal of it must have been done by careful selection, from among the native cattle, and better feeding and treatment; but when we look closer into the matter, the shortness or rather the diminutiveness of the horns, the width of base, and awkward setting on; the peculiar tapering towards the muzzle; the narrowing at the girth; the bellying; and the prominences of all the bones—these are features which it is impossible for any selection from the native breed to give. While the judge of the cattle will trace the features of the old breed, he will suspect what general tradition confirms, that it was a fortunate cross, or a succession of crosses with some foreign stock, and that, probably, it was the Teeswater short horn that helped to improve the Cunningham cattle.

In many other districts of Scotland the attempt to introduce the Teeswater breed, or to establish a cross from it, had palpably failed, for the soil and the climate suited only the hardihood of the Highlander; but here in Ayershire was a mild climate—a dairy country; the Highlander was in a manner out of his place; he had degenerated, and the milking properties of the Teeswater and her capability of ultimately fattening, amalgamated with his hardihood and disposition to fatten, and there resulted a breed, bearing the stamp of its progenitors, and, to a very considerable degree the good qualities of both.

*How the Farmers Esteem the Valley Farmer.*—A farmer in Lincoln county wrote to us as follows: “The Valley Farmer makes its monthly visits to us. I think it is just such a paper as every farmer in the great west should read. The Ladies’ Department is worth more than the subscription price. When it comes all other papers are laid aside until it is perused, and I venture to say that any person that will read the Valley Farmer for this year will not regret so doing, nor will he be willing to admit that his time or money was mispent. Indeed, my last year’s numbers

cannot be bought for the dollar. I have carefully filed them away, and frequently refer to them to doctor a horse or cow. I send you two new subscribers. I have told them if they were dissatisfied at the end of the year I will refund their money. I also send one dollar for myself. I expect to be a subscriber as long as I am a farmer, and I want all of my neighbors to have a copy of the Valley Farmer.”

#### Editorial Correspondence.—Letter 1.

STEAMER WESTERN WORLD,  
Lake Erie, Aug. 23, 1854.

At 15 minutes before 7, A. M., on Monday morning, Aug. 21, the Steamer Reindeer left the port of St. Louis freighted with some 200 souls, among whom we recognized several citizens of our city. A short run of two hours and a half brought us to Alton, where we took the cars for Chicago. Having heard so much of the drouth, we felt inclined to notice for ourself the appearance of the country as we passed along, and from what we saw, and could learn from those whom we met and talked with, we should give it as our opinion thus far on our way, that the drouth is worse on the line east and west of St. Louis than any where north of that line, excepting perhaps, the eastern part of the State of Michigan. The farmers of Madison and Macoupin counties, we should judge, will make half a crop of corn. Sangamon county is better than that, and as we progressed north to Bloomington in McLean county we noticed a gradual decrease of the signs of excessive drouth. At Bloomington, we stopped till the next train, and as we left there at 2 o’clock at night we had no opportunity of noticing the appearance of the crops for the next 60 miles or so, but when daylight came, and we found ourselves at Wilmington, a very perceptible improvement was manifest, and from there to Chicago, and from Chicago half way to Detroit there was no appearance of unusual suffering for the want of rain. But as we passed the middle of the State of Michigan and approached Detroit the want of rain was manifest all

around, not only in the withered condition of the crops, but also in the appearance of the fruit and pastures. The woods appeared like tinder, and like tinder they had been set on fire in innumerable places by the sparks from the locomotive, and we saw along the road where many miles of fence had been thus burned. Night closed in upon us about forty miles west of Detroit, and from there to Detroit, we constantly saw fires on either side of us. An immense amount of damage has been done, and we suppose the railroad companies will have the bill to foot. From what we saw and could learn, we think Illinois taken together will raise full two-thirds of a crop of corn, perhaps three-fourths, and as there is an abundant supply of mast it is not likely that our sucker friends will lack either *hog or homony*. Of fruit there appears to be a very little, and that of a very inferior quality. We have not seen over a half dozen good apples since we left Alton.

Traveling is not the tedious matter in point of time that it was ten years ago. We lay over nine hours at Bloomington, for rest, but precious little did we get. "*That new Hotel*" may be a great improvement, as it claims to be, over the old public house there, but we could suggest many improvements in its appointments which would add much to the comfort of the guests. Arrived in Chicago at 8 o'clock A. M., and left again at 11, *via* Michigan Central Railroad and arrived in Detroit at half past nine P. M. and went directly on board the Western World steamer, where we obtained last night a good night's sleep and the first real rest we had had since we left St. Louis. We had only time at Chicago to take a hasty look at some of the principal streets and buildings—notice the constant bustle of business going on, and see enough to convince us that Chicago is destined to occupy a very prominent position among the large cities of the land.

The Western World, on which we now are embarked is without exception the finest boat we ever had the pleasure of traveling on. The Michigan Central and the New

York Central railroad companies have built this boat and another called the Plymouth Rock at an expense of \$260,000 each to accommodate the travelling public between Detroit and Buffalo, one boat leaving port each evening at 10 o'clock. The two were constructed after the same model, are of the same length, breadth, capacity and power, and their external and internal arrangements are precisely similar. Length 345 feet; breadth of beam 45 feet; depth of hold 15 feet; tonage 2200 tons. The cabin accommodations are for 800 passengers, while as many more can find room in the steerage. The Western World is commanded by Capt. C. C. Stannard, the Plymouth Rock by Capt. G. E. Willoghby.

#### Postponement of the State Fair.

We have recived from S. FRANCIS, Secretary of Illinois State Agricultural Society, a circular, from which we extract the following preamble and resolution, which will be of interest to those making preparations to attend the Fair:

WHEREAS, Representations have been made to the Executive Committee of the State Agricultural Society, from members and other gentlemen in different portions of the State, that the interests of the people and the Society would be consulted by postponing the State Fair to a later day; therefore, it is

*Resolved*, That the State Fair shall be held on the 3d, 4th, 5th, and 6th, days of October, on the plan and under the regulations published with the official list of premiums for the present year.

It is also determined to greatly enlarge the conveniences for exhibiting stock, and other articles; and to obtain an adequate supply of forage; and to adopt every proper measure to secure such an attendance and exhibiton at the Fair as will justify a favorable comparison with the best State Fairs in the Union.

**GREAT WHEAT COUNTY.**—The *Burr Oak* says that 1,000,000 bushels of wheat will be raised in Dodge co., Wis. this year. It is also certain that there are thousands of acres that will yield from 50 to 60 bushels to the acre

**Howard Co. Agricultural Society.**

A letter to the Editor of the *Valley Farmer*, dated, Fayette, Aug. 11 1854, says: "The Board of Directors of the Howard Agricultural Society met to-day to fix the time of holding the Fair, and other business. We have appropriated \$800 in premiums, given \$15.00 for a lot of ground, and are now busily engaged in improving it. Boone last year gave \$400 in premiums. I wrote you in a former communication that 'Howard had entered into this with that spirit that knows no failure.' Do you not think I was right? You and your valuable paper have contributed largely to build up this spirit of enterprise and improvement which will assuredly render Missouri the foremost in this bright galaxy of States."

In a postscript the writer informs us that the time for holding the fair has been fixed for Tuesday, Wednesday and Thursday, Oct. 17, 18 and 19.

We are sorry that our pre-engagements are such that we shall not be able to attend the Howard County Fair this year. If we live we hope we may be able to attend next year. Howard has nobly supported the *Valley Farmer*, and within its limits reside some of our warmest friends. We love the county and its people, and if our feeble efforts have contributed anything towards waking up the attention of the people to the importance of Agricultural improvements, we are more than repaid for all we have done.

Two years ago last June we addressed in a feeble manner a few friends of agriculture assembled at Fayette, upon this subject; urging upon the people the importance of organizing a Society, and making a movement in the way of progress. The people appeared interested, and took some initiatory steps towards organizing. But there was a want of the necessary concentration and energy to insure success, and the subject was dropped for several months. The action of neighboring counties, however, had its effect upon the people of Howard, and we see that they have gone into the enterprise in the right way. May the

contagion spread until every county in our beloved State feels its influence and is incited to action.

**Oregon.**

We have quite a respectable list of subscribers to the *Valley Farmer* in this new and thriving Territory, chiefly obtained through the agency of Mr. Thos. WATERBURY, of Oregon City, who writes us that he has been a constant reader of the *Valley Farmer* for nearly three years, and has derived much information from its pages, and believes there are many other persons in Oregon who would say the same thing if they could be induced to try it, but as in many other parts of the country, there are people to be found there who go against what they call "book farming." We would inform our friend over there, that this class of men are becoming more scarce every day. In a few years they will be regarded as curiosities and some enterprising showman like Barnum will scour the country for specimens for exhibition in the museum.

We have lately received several copies of two neatly printed papers from Oregon—the "Spectator," at Oregon City, and the "Oregonian," at Portland. From the latter we cut the following paragraph, in which we recognize the name of a subscriber to the *Valley Farmer*:

**LARGE WHEAT.**—Capt. Z. C. Norton, of Clackamas, left at our office a specimen of wheat, the growth of a single root. There are twenty-one distinct stalks, each crowned with a large head varying from three to six and a half inches in length. The majority of the stalks are over six feet in length. We doubt whether this can be beat in Oregon, and we are quite sure it cannot be elsewhere.

From the same paper we find these items, from which it appears that the drouth which has been playing "Hobbs" with the corn fields and potatoe patches of these diggens had not then reached our Pacific neighbors. **RAIN! RAIN! RAIN!**—Thus far during the spring and summer we had a genera



assortment of weather, consisting mostly of two rains to one sunshine.

**SEVERE HAIL STORM.**—On Sunday last, we were visited with a hail storm of near an hour's duration, which for severity is unknown in this country. Fruit trees, shrubbery, gardens, &c. were materially injured in this vicinity. We learn, however, that at a distance of a few miles, no injury was done to the growing crops.

Correspondence.

### Industrial Education.

JULY 27th, 1854.

Dear Sir,—Although personally a stranger, your well known reputation as an agriculturist and friend of progress have induced the Board of Directors of Farmer's College through their Committee of Correspondence to address you personally, soliciting your attendance as a Delegate of a Convention to be held at the Farmer's College, College Hill, Hamilton county Ohio, on the 13th, 14th, and 15th days of September. This Convention is intended to embrace as large a number of the friends of Industrial University Education as can be convened from the entire West and South-west, indeed from the whole Union.—While so much is said upon the importance of the application of Science to Agriculture and the Arts, and the having a class of Institutions of a high order, better adapted than are our existing Colleges for the more liberal mental training of the million it is deemed especially desirable to embody public sentiment upon this subject, and if possible enter upon some uniform plan of operations that our efforts may be made to tell more speedily and effectually upon the great industrial pursuits of our country, practically that of agriculture. It is proposed to devote the first two days to the consideration of the various topics of interest connected with Collegiate Education in its relation to these pursuits. It is further proposed, if practicable to dedicate our Farm and Gardens to the purpose of experimental Agriculture and Horticulture as connected with and thereafter to form a

department of the Farmer's College—an accession which will enable us to say many things with effect. We herewith send you a circular, also our last Annual Catalogue and the Industrial Address of Pres. Allen, through which document you will learn more of our plans, progress and prospects. It is intended to use our best exertions to have a *grand rally*—for we feel that great and important interests are involved, and nothing shall be wanting on the part of the Board to make the occasion one of great interest and profit. Prof. Turner, of Jacksonville, Illinois, and Pres. of the Industrial League has promised to be with us, and bring as many of his friends as he can from Wisconsin and Illinois. Numerous distinguished individuals from this and other States will be with us on that occasion. If you cannot come send us per letter your views on the subject of Industrial University Education or applied science, &c., that your testimony may go to swell the tide of influence in favor of this our common cause. The 15th will be the day of *grand rally* and Barbecue and much public speaking. The *great day*—our State Agricultural Fair, at which much is anticipated, and for which great preparations are being made will take place the week after, commencing on the 19th. This occasion will also be of great interest, and both cannot but furnish attractions sufficient to make short sojourns profitable and interesting in this our great Buckeye State.

With sentiments of most profound respect and esteem, I subscribe myself  
Yours in behalf of the Board,

F. G. CARY, O

E. ABBOTT, Esq.

We regret exceedingly that we are unable to accept the kind invitation contained in the above letter. But as we cannot neglect to attend the Pomological Convention in Boston, which meets at the same time, we must forego the pleasure. For a long time we have urged upon the farmers of the West the necessity of a better system of education than has been hitherto followed; and have looked with no little interest to the

movements of those who have been endeavoring to promote a change in this respect. That it is high time for the friends of an enlightened and practical system of Industrial Education to move forward is our firm belief, and we hail with joy every movement made by them. We hope this convocation will be the means of doing great good, and that an influence will go forth from it which will pervade the whole land, and that it will not stop until Farmer's Schools and Colleges shall be established in all parts of the country, and every farmer's boy has an opportunity offered him to acquire such an education as will enable him to demonstrate in his own experience that his calling is the noblest and best of all occupations.

#### CIRCULAR.

##### U. S. AGRICULTURAL SOCIETY.

At a meeting of the Executive Committee of the UNITED STATES AGRICULTURAL SOCIETY, held in the city of Washington, in February last, it was resolved that the Society hold no Exhibition in any State having a State Agricultural Society, without the assent of the Officers of the Executive Committee of such Society.

The citizens of Springfield, Ohio, have requested this Society to hold an Exhibition of Cattle at that place, during the current year, and generously subscribe about ten thousand dollars to defray all the expenses of the same, and to guarantee the Society against loss; and the Executive Committee of the Ohio Agricultural Society uniting in the request, the Executive Committee of this Society have concluded to hold a NATIONAL SHOW OF CATTLE, open to general competition, without sectional limit, on the 25th, 26th and 27th days of October next, at Springfield, in the State of Ohio.

The friends of Agriculture in all States of the American Union, and in the neighboring provinces of Canada, are invited to co-operate with us, so that this Exhibition may be more extensively useful, and be alike creditable to the generous citizens of Springfield, with whom it originated—to the Contributors and Visitors, who sustain it,—and to the United States

Agricultural Society, who are so deeply interested in its success.

In consequence of the holding of this Show of Cattle, the contemplated Exhibition of Horses, at Springfield, Mass., and the Show of Sheep, in Vermont, will be omitted.

The JOURNAL of the Society, which the Executive Committee have concluded to issue once in each year—four numbers in one,—will appear in January next; and will contain the transactions of the Society at its last Annual Meeting, the Lectures and Addresses delivered at that time; a full and faithful account of the Springfield Show, with other valuable papers, by eminent members. This volume will be forwarded to all members who have paid their annual assessments for the year 1854.

MARSHAL P. WILDER, Pres.

WILLIAM S. KING, Sec.

Boston, August 1, 1854.

#### A Productive Half Acre.

The *American Agriculturist* gives the following statement of the product of a single half acre of ground belonging to J. H. Smith of Norwalk, Ct., who is a laboring mechanic, and does most of the labor of his garden with his own hands—the whole being arranged with perfect order and without confusion:

His lot is about 100 feet wide, and of course extends back 250 feet to make half an acre. The front half contains the house and side plots—the house being upon one side of the lot. In this front area, in part covered with grass, are quite a variety of fruit and ornamental trees, including 14 cherry trees of different varieties; 4 standard and 10 dwarf pear trees, 2 dwarf apple trees, 6 peach trees, 3 Norway spruce, 1 white pine, 2 balsam fir, 2 horse chestnut, 1 mountain ash, 4 common white ash (in the street outside the fence), 4 common forest dog-wood, 2 elms, 5 roses of Sharon, 2 wax plants, 12 varieties of roses, besides flowering currants, sweet scented shrubs, &c.

Back of this ground commences the garden, which is not as it should not be, separated from it by any fence. In the rear is a cold grapery, 14 by 32 feet, with a grape border in front 18 feet wide. The rest of the ground is planted with various fruit trees, and divided into plots containing each of the following: beets, two varieties of onions, cab-

bages, potatoes, sweet corn, cucumbers, peas, three varieties of beans, gherkins, summer and winter squashes, radishes, two varieties of lettuce, nasturtions, eleven varieties of strawberries, five varieties of raspberries, several vigorous hills of New Rochelle and white blackberries, two varieties of gooseberries, and three varieties of currants. In addition to these, there are plants of hops, sage parsley, pie plant (in abundance,) wormwood, and a variety of flowers.

On this ground are three apple trees, three plum trees, twenty peach trees, and seventy-five dwarf pear trees of 42 varieties.

The cold graperly is new and cost near \$400. A plain one for common use may be built for one-half or one-fourth of this expense. This one has a cistern, with a simple and inexpensive force pump, to which is attached hose and pipe for throwing water into every part. It contains 24 grape vines of 13 varieties.

The various vegetables and fruits are so selected as to furnish a succession for the table during the entire season. In addition to a bountiful supply for his own use, Mr. Smith sells strawberries, blackberries, plants &c., enough to pay for all extra labor employed, and for most of the manure he purchases.

After reading this enumeration, who will say that a single half acre, if rightly managed is not capable of ministering greatly to one's taste and comfort, as well as profit?—What Mr. Smith enjoys from his plot of ground, could not be purchased for many hundreds of dollars, if it could be purchased at all; while as before stated, the cost is comparatively trifling. The time and labor devoted to these grounds serve as a recreation, rather than a tax upon the regular labors of the day.

**WHEELER'S HORSE POWER.**—I have had some experience in the use of Horse Powers. Now I would say to your correspondent, M. S. B. by all means purchase one of Wheeler's endless chain powers, and if it does not work to perfection, and fulfil all his expectations and satisfy all his desire, charge it to my account, and I will pay all damages. I consider it the most perfect horse power for a farmer, that can be imagined. A PRACTICAL

THRASHER AND FARMER.

Vincennes, Wis. Country Gentleman.

**HIGH PRICE FOR MULES.** On Monday last at Georgetown, Ky., ninety-six yearling mules belonging to J. F. Paire of Scott county, were sold to W. Rogers of Bourbon, for \$110 each. T. F. Marr of Scott, for two prime mules paid \$221 each.

For the Valley Farmer, *limb* 1864  
**The Hemp Crop.**

SALINE COUNTY, Mo. }  
August 21st, 1864. }

MR. E. ABBOTT, Dear Sir:—In accordance with your standing invitation to your subscribers to give you any information in regard to crops that may be of general interest, I write you a *hemp letter*.

By the way, I regret to observe that our old and experienced hemp planters are not more prolific in the way of epistolary productions to your widely circulated paper—giving their views and observations on the culture and handling of this very important Missouri product.

I find no crop in regard to which there is so great a variety of opinion. Indeed nearly every farmer has his own views, and to a great extent, acts in conformity therewith. Hence it is I am induced to believe it is the kindest crop we grow—receiving such a great diversity of treatment, and prospering so well under all.

So far as my observation extends, (and it is not limited) the hemp crop this season in Missouri, will be a short one. The early sowing is good, but owing to the backwardness of the farmers in breaking out their last year's crop, at least three-fourths of the growing crop is late, and consequently cut short by the continued drouth. Various estimates are made as to the decrease under last year. Most farmers put it down at one-third less. But having water-rotted some and ascertained that the lint is light, I believe the yield will not much exceed half that of last year.

But the most distressing feature is the prospect of an almost entire failure in seed. I am satisfied there will not be seed enough raised in Saline county to sow half the amount that was sown last year or this. I believe that many persons will not make more than enough to plant for seed next year. The question then arises, what are we to do another season? The Kentucky crop, (I learn from correspondence,) is in

a very similar situation to our own, owing to the same cause.

Yours truly.

X.

For the Valley Farmer.

### Wheat Sowing.

We are glad to see that the farmers of the west are very much increasing their wheat crops—finding it more agreeable and far more profitable than the enormous culture of tobacco. And as the season is now at hand, we will say a word upon the subject of preparing for and sowing wheat.

A certain degree of fertility of soil is necessary to succeed in raising wheat—this degree is to be learned by experience. The crop is as precarious in too rich as in too poor soil; and upland is preferable to bottom.

Wheat should never succeed to corn, unless the ground has "laid by" a season; in the latter case a good crop is sure, unless the elements wage a positive war upon it. Oats is an excellent precursory of wheat—leaving the ground mellow and clean, two requisits in successful wheat culture. The stubble should be turned under as soon as the oats are off the ground giving time for decay before sowing time; moreover, a luxuriant crop of young oats will spring up, which turned down in "flushing up," will prove a valuable and efficient manure, and quickener of the soil—the latter being much needed on prairie lands generally.

Wheat should never succeed to wheat, lest the grain degenerate, which it will certainly do. Virgil, the Philosopher as well as poet wrote an axiom when he penned—"The true repose of the earth is the change in its productions." Speaking of plants, and the same holds good in relation to grain vegetation—Bridgman, the seedsman and florist, remarks: "It is a curious fact that a plant may be killed by the poison which it has itself created, as a viper may be stung to death by its own venom. Hence it has been very generally noticed, that the soil in which some particular vegetables have grown, and into which they have discharged the excretions of

their roots, is rendered noxious to the prosperity of plants of the same allied species though it be quite adapted to the growth and support of other distinct species of vegetables." Let this suffice.

I believe in early sowing. The first and second weeks in September embrace the time. From 1-4 to 1-3-4 bushels is the proper quantity per acre—the former on new, the latter on old lands—thrown broadcast. In order to sow regularly, lay off your lands ten feet in width, and sow to and fro, throwing the grain from one side to the other of your lands; thus scattering half the quantity each time. The reason for this mode of sowing is too plain to make detail necessary.

We recommend harrowing rather than plowing in wheat, in western soil, at all events the surface should be left level. We have seen frequent reason for this. We know how apt our western soil is to "run together," in the wet winter season if left in ridges—by this means covering up the germs in the hollows, and leaving the roots of others too much exposed. Again in dry, windy winters—and prairie farmers have seen this; the continuous and tremendous winds blow off the apexes of these ridges, thereby leaving a large portion of germs to perish. After cross-harrowing we highly enjoin rolling with a heavy roller.

Wheat will suffer nothing from moderate grazing provided it be done not after the 20th of January, and only when the ground is dry and firm.

Tobacco or corn stalks thrown on bleak places, have the most happy effect on the wheat crop. We have seen this to our perfect satisfaction.

In all cases wheat before being sown, should be rolled in warm tar and ashes. Besides being very offensive to moles, tar is in effectual remedy against smut in wheat.

We have thus briefly given our mode without comment; and the only comment necessary is to follow it, when putting in wheat.

QUID NUNC.



**Profitable Strawberry Bed.**

Mr. ABBOTT. While in your office last spring you gave me a copy of the Country Gentleman containing an account of a "Profitable Strawberry Bed," cultivated by L. A. Brown, West Haven, Conn. Since that time I have had the pleasure of visiting him and also his strawberry bed, &c. As he has had very marked success with his strawberries, both in quantity and quality, I thought it might not be unprofitable for many of your readers to learn his manner of cultivating.

After putting the ground in proper order early in the spring, he marks out with a line two rows a foot apart, he sets his plants about ten inches in the row. He then sets out another row three feet from these, alternating with three feet and one—then letting the runners fill up the three foot space. He has his beds three feet wide with a foot alley between them, the runners being kept down between the rows a foot apart. They are then kept perfectly clean of weeds throughout the season which he says is the main cause of success. The ground should be only moderately rich. The kind cultivated, Hovey's Seedling and Boston Pine. This year he sold from one and a half acre \$800 worth. They were the largest and finest berries ever exhibited in market, many of them measuring over 4 inches in circumference. I did not see any in the New York market larger than those he discarded as unmarketable.

I wish I could impress upon the minds of our farmers how easily and cheaply such berries can be raised. How amenable we are to our friends if we fail to provide them with these seasonable and healthful luxuries created by a wise and beneficent parent for his creatures. As to their healthful properties I will mention only one instance.—The writer of this being at the time of this visit in bad health of a disease of the stomach, would not taste them until after long persuasion by his friends. On trial they were found to be not only harmless, but of decided advantage, more so than any med-

icine I had taken. I also found cherries of great benefit. Thus proving that God had beneficent designs in all his works.

H. L. B.

**The Palmer and Cut Worm.**

In the year 1791, the farmers of Cumberland county, Maine were surprised by finding the forest trees, and orchards stripped of both leaves and fruit by small caterpillars, that appeared suddenly in vast numbers. Thence they spread to other parts of New England, arousing speculation and carrying dismay wherever they went. The insect was quite new, and was christened with the name first placed at the head of this article. Before winter, however, every one had disappeared; and not an individual has been seen in the United States from that day till last spring, (1853,) a space of sixty-two years. At this latter period, Dr. Harris first noticed it on the 10th of June and by the twentieth, there was one general lamentation from central and eastern New York, the adjacent parts of Vermont, the valley of the Connecticut and Housatonic Rivers, parts of New Hampshire, Rhode Island, Connecticut, and Massachusetts. Here the devastations were very marked, and the worms not eat only the leaves, but afterwards the young fruit. In places, the orchards looked as if a fearful blight had passed over them.

According to the Entomologists, this insect belongs to a group called *TINEAE*, and to the genus *Chatochilus* of Stephens. Dr. Harris has named it *Chatochilus Pomella*; or Little Orchard Snout-Moth. In its perfect state it is an ash gray moth (or miller,) sprinkled with blackish dots, three of which, larger than the rest, are placed triangularly near the middle. Body and legs beneath, yellowish white, with a lustre of satin; length five sixteenths of an inch. The caterpillars grow about half an inch long, and they are mostly of a pale yellowish green color, with two blackish lines along the top of the back. When the tree is shaken they spin down and hang by threads. About the end of June, they cover themselves with a transparent web, turn to a chrysa-

tals, and become moths in four to ten days after. But a beautiful provision of nature is here manifest. More than half of the worms perish from an internal parasite; a minute grub, which after preying on the vitals of its victim, leaves the body and becomes a tiny four-winged ichneumon fly.

Whether this pest will now become permanent, or again disappear for more than half a century, we do not know; but the probability is that it will gradually spread over the whole of the Northern States. Should such be the case, Dr. Harris recommends showering the trees with soap suds, or whale oil soap, or lime water, dusting ashes, or air-slacked lime on the leaves, or casting dry sand on the trees.

While on this subject, we may mention that there is every probability that the *Cut Worm*, which is doing so much injury this season to corn planted in sod land is quite new to this part of the world. It is rarely more than an inch in length; is of a dark puce color, with minute white spots along the back. Instead of burrowing like the common grub, it remains on the surface, and covers itself in a half cylinder of strong net work, within smooth and white covered with particles of soil. It eats the young Corn only above the ground. From 2 to 12 individuals were found in a hill, but usually 4 or 5. The pumpkins were rarely touched by them. They moved with rapidity when disturbed. In the Eastern part of Michigan, probably not a field has escaped where sod was plowed, but fallow land is quite free from injury.

#### Substitute for Corn.

As there is a great scarcity of corn in the country, and farmers are likely to be much inconvenienced by it, for food for their hogs, I am tempted to offer the following for their benefit.

Out Timothy hay very fine, and boil it well to which add one part of oat meal or bran, to two of the cut hay. This mixture will not only keep your hogs well but fatten them. The same is good for milk cows.

In 1834, necessity obliged me to use the above, and answered well.

The editor of the *Alton Telegraph* has been furnished with the above by a farmer friend.

We do not see why the suggestion may not prove very good. Hogs are very fond of timothy when green, and they will thrive well on it. It "stands to reason" that it loses none of its nutritive elements in ripening and drying, and if it can only be palatable by the method above suggested, the problem of making pork without corn is solved. Let the experiment be generally and thoroughly tried.—*Intelligencer*.

#### New Oxfordshire Sheep.

MEASRS EDITORS.—In common with many agriculturists I have long observed that the rapid increase of population and consequent rise of land in this part of our country, have made the raising of fine woolled sheep unprofitable and inexpedient. I had read in your paper and in others, notices of a new variety of sheep called New Oxfordshires, said to be of remarkable size and beauty, and raised by John T. Andrew, Esq., of West Cornwall, Ct. The reports of those who had purchased of this flock were so favorable that I determined to venture on a small experiment with them myself. I accordingly visited Mr. Andrew last fall, examined the flock of sheep, learned something of their character, history, &c., and selected three lambs with which I reached home safely. The growth of these lambs has been more rapid than any I have ever seen. They were shorn on the sixth of June, then 13 months old, and the three lambs yielded thirty-five pounds of clean, long, white and silky wool. The male lamb weighed one hundred and seventy-two pounds and his fleece 15 pounds. The weighing was in the presence of disinterested witnesses and can be fully verified. If any person has larger and more beautiful lambs he will confer a great favor on the community by making it known. I have studied the subject with deep interest for some time, and with my present information it is my opinion that this is, taking all things into account, the best and most profitable variety of sheep known.

A GOOD MOVE.—We learn that an agricultural association has been formed in the southern part of Virginia, which is to be called "The Virginia and North Carolina Agricultural Society," will be held at Petersburg in October next. The Society have determined to purchase an experimental farm, and have already obtained subscriptions to the amount of \$15,000. Agricultural exhibitions will also be held this year in Virginia, at Richmond and Wheeling. We have no doubt that the Society above mentioned will be productive of much good to the farmers of that region. It is a step in the right direction, and one that we hope may prove only the first of a series of similar advances.

### Renovating Old Grape Vines.

The best mode of renovating an old grape vine, is to make bare its roots for several feet around the stem, remove the ground entirely and then apply two or three bushels of bones which should always be preserved about a place for this purpose, partially broken up; and on the top of these add from one to two bushels of wood ashes, according to the size hole to be filled, mixed with some hog manure and rich soil. In one year should this plan be pursued, a marked change for the better would be produced.

In pruning an old grape vine which has been allowed for years to take its own course, it should not be topped too short, the first year. About 12 or 15 feet, according to size should be left to remain; the lateral branches should be thinned out to one or two feet apart, and at that distance tied to the trellis firmly. The fruit bearing twigs found upon these should be pruned down so as to allow about three buds to each;—and the work is done.

The best time to prune is at any period before the sap begins to circulate—say in January, February, and first half of March.

No external application to the branches will help their productiveness. Soap-suds applied to the roots plentifully, on washing days are of great advantage.—*Germantown Telegraph.*

**RAT KILLING.**—Traps for catching rats or mice, ought to be baited with oat or Indian meal, and scented with oil of rhodium. This article, which may be had at the druggists, will attract rats and mice in great numbers. Bait the traps in this manner for two days, with the springs checked, and renew the composition when consumed. On the third day, they will enter freely; remove the check and commence the work of destruction. Be careful to remove the vermin as soon as caught.

**TO DESTROY HOUSE FLIES.**—Amongst "the miseries of the human life," during the warm season of the year, may be reckoned the tickling, and buzzing, and obtrusive familiarities of the common house flies. A correspondent of a British newspaper, tells us how to destroy these pests. He says,—"Pour a little simple oxymel (an article sold by druggists) into a common tumbler glass, and place in the glass a piece of cap paper, made into the shape of the upper part of a funnel, with a hole at the bottom to admit the flies. Attracted by the smell they readily enter the trap in swarms, and by the thousands soon collected, prove that they have not the wit or disposition to

return. I recommend this plan with confidence, for I have already destroyed great numbers."

**CALIFORNIA WINE.**—Considerable quantities of wine are made in Lower California, and the article is manufactured from the pure juice of the grape, which is extracted something after the Madeira fashion. The San Francisco Advertiser says that the grapes are thrown into a small box, perforated at the bottom with numerous small holes. An Indian steps barefoot into this box, and tramps out the juice, which flows thro' the holes into the receiver beneath. The wine thus produced is very sweet and good.

### Prospects of Crops.

We have heard of such good crops this present season, throughout the State generally. Oats are unusually fine and heavy, and so is Spring Wheat. Corn also bids fair to be very abundant, though the drought has destroyed it entirely in some localities.

The drought in this vicinity, with the intense heat of the sun combined, has ruined the gardens, and spoiled our vegetable market. For more than a year we have not had sufficient rain to affect the wells, many of which have dried up entirely, causing much suffering among the stock.

The fruit crop in our neighborhood will not be abundant, though fair in some favored spots. Other cultivators, usually favored with excellent crops, have lost all. The principal cause was the late frosts and cold weather in May and June.—*Iowa Farmer.*

**For Hoven or Bloat,** caused by eating clover, give a tea-cup full of salaratus dissolved in a pint of warm water, and turned down a cow from a junk bottle. A few spoonfuls of tar put in the throat by the aid of a smooth stick, will also give relief.

For some years I have been in the habit of watching the gum in my wife's camphor bottle, which stands in our bed room. And when not disturbed it makes a capital weather glass. It answers my purpose as well as a barometer that would cost me \$25 or \$50. When there is to be a change of weather from fair to windy weather from fair to windy or wet, the thin flakes of the gum will rise up, and when there was to be a great storm I have seen them at the top. When they settle down clearly at the bottom then we are sure of good weather. Any farmer who will watch his wife's camphor bottle for a season, will never have occasion to watch the birds or locusts or ants for indications of a change in the weather.—*Ec.*

### Sheep Raising and Wool Growing.

We have already given some copious extracts from Dickinson's address on the subject of butter making—the following practical hints on growing wool, and on the selection and management of sheep contain much that is valuable.

The growing of wool is as different a business from that of growing sheep, as dairying is from that of raising cattle. The farmer who lives near a market-town, with a pasture adapted to grow sheep, should keep a large sized animal; first for the purpose of selling lambs, which if good at ten and twelve weeks old, bring in the New York market, from three to six dollars, (I have sold one at nine dollars); the carcasses of the dams are usually disposed of the same season, as the lambs are taken off early, and ewes get fat and are sold at an advance of two or three dollars above what they cost the year previous; therefore wool is but a secondary consideration with the sheep grower. The Southdown is one of the best breeds for marketing. The same farmer with precisely the same kind of land, two or three hundred miles from market, without a Rail-Road communication to send forth his lambs and fat sheep, would keep and grow an entirely different sheep for the reason that wool would be his object. The large sized Southdown ewe would weigh one hundred pounds; a common sized Saxony ewe if well kept would shear three pounds, which would bring, if of the best quality, seventy cents a pound. The Southdown would bring forty cents the pound. The Southdown eat twice as much as the Saxony, which would make just twice the difference in quantity. For keeping the hundred pounds of Southdown, he would receive one dollar and twenty cents, while for keeping one hundred pounds of Saxony sheep, he would receive four dollars and twenty cents—more than three times as much. It may be said by some that large sheep will not eat twice as much as small ones; I have only to say that whoever will take the trouble to weigh his sheep and hay, will find the rule holds good with sheep, and the same holds true with neat cattle, not with horses any more than with man. Small sheep of the same breed, shear more wool according to their size than the larger ones, as two small sheep have more surface than one that weighs twice as much; and therefore the smallest healthy sheep of any breed, gives more wool according to what it consumes than a large one; and another great difference between the Southdown and the Saxony is the one has a thick tight fleece, while the other has a loose open one.

And with all your advantage for growing fine wool, I would not advise the keeping of the Saxony over the heavy fleece Merino, unless I know my man. In the first place I should want to know that his horses were not shod in winter. In the next place that he was a very industrious man, one who would rather work than play, and withal a patient man with a wife that prefers her own fire-side in winter to that of her neighbors, one who would rather receive company than visit.

If you have such a man or set of men they can make more money by growing the finest and best wool than in any other way.

For the man that does not keep his horses shod, cannot very well spend much time sleigh riding, and if a patient man, if one of his sheep gets poor and weak, he will feed in such small quantities, as not to kill it by over-feedings which is usually done, and if an industrious man he will see his flock at least three times a day.

**SAVING GRASS SEEDS.**—Sufficient attention is not given to the saving of seeds. It is not a difficult matter, even without the aid of a machine for the purpose to gather all the clover seeds that may be wanted on a farm of common size. It may be taken from the second crop, and threshed and cleaned up as are other seeds. So with bird's grass—leave a square of a few rods where the heads are large, and where no weeds are intermixed with the grass, and at the proper time cut, thresh and clean it up. Every dollar saved in this and various other ways by the farmer will give his cash account, a favorable aspect at the end of the year. Indeed, a little pains will give the small farmer all the seeds he requires, of every kind, so that he need not expend a shilling in money for them. Also preserve all other seeds which will be needed for another year's use.—*N. E. Farmer.*

**THE STATE AGRICULTURAL FAIR.**—The New York State Agricultural Society have signified to the Common Council their acceptance of the offer of the use of Hamilton Square for their next annual exhibition. The American Institute having abandoned its annual fair for this season, will co-operate with the Agricultural Society in rendering the coming exhibition as extensive and interesting as possible. Hamilton Square has an area of about eighteen acres. The ground is to be prepared for the purpose of the exhibition by the 25th of September, and will be opened to the public on the 3d of October. As the Crystal Palace exhibition will be open at the same time, a great influx of visitors from the country may be anticipated.—*N. Y. Eve. Post.*



From the Country Gentleman.

### Grazing and Butter Making.

We have not for a long time met with an agricultural address, containing such an amount of condensed practical matter, and exhibiting such a degree of close observation and shrewdness as that of A. Dickinson, of Havanna, N. Y. before the Tioga Co. Ag. Society, Pa. It is wholly devoted to the subject of grazing in its different aspects, and although some of the views expressed may not receive the assent of all farmers, yet there is much to interest and instruct, and much that is suggestive of improvement. This affords a strong contrast with the many we receive from different quarters, characterized with theoretical and pseudo scientific reasoning, and as such it cannot fail to please those who have become tired of discourses on husbandry from learned and eloquent men from towns and cities. Our readers will find much to interest them in the following extracts; the first on the subject of dairy pastures and butter making.

The first quality butter land is confined to portions of the New England States, New Jersey, Pennsylvania and New York, while cheese can be made and sheep grown wherever grass grows, as I will endeavor to show hereafter. First quality of butter has been worth, on an average, for the last twenty years, twenty five cts. per lb. Last year it brought in New York market, thirty one; this season twenty-five cents; and when I speak of these prices I mean the very best quality that can be made, which is very small—but might be very much increased. You have here all the elements for making just that kind of butter. To begin with, you must have in your pastures Timothy, White Clover, Blue Grass, Red Top or foal Meadow Grass, which I think is one and the same thing, only differing as it grows on different soils, pure soft water, and a rolling or a hilly country. All these things you have, or may have, as these different grasses will all grow well, if sowed and properly cared for; and I have never seen the first pound of good butter made where the cow did not feed on some or all of these until they have been sown long enough to have the soil swarded over, to protect them from the sun, frost and drouth. There will be then, and not till then, a solidity and sweetness to the grass that will give to the butter, that rich sweet flavor which makes it so desirable. Butter partakes not only of everything the cow eats

and drinks, but of everything offensive with-in its reach after it is made, as for instance, if a cow be fed on Rutabagas, her butter and milk partake of that flavor. If she feeds in pastures where leeks, garlics and wild onions grow, there will be still a more offensive flavor. If she feeds in pastures where she can get a bite of briar leaves, beech or apple-tree leaves, or any thing of the kind, it injuriously affects the flavor of the butter, though not to the same extent, and would scarcely be perceptible for immediate use. So with red clover. Butter made from cows fed on red clover is good when first made, but when laid down in packages six months or a year, it seems to have lost all its flavor, and generally becomes more or less rancid, as the clover was of rank and rapid growth on which the cow fed. The water the cow drinks must not only be soft, but clear, living wholesome water, fit for the use of man. If she drinks from stagnant, filthy water, it will knock off three or four cents the pound from butter, all other things being right.

In the western country on plain or prairie, the most of the water, in dry seasons of the year, is in stagnant streams, or pools covered up with a green blanket, and just in the same proportion as it is offensive to the smell or taste of man, it will exhibit itself in butter, when laid down for any length of time; yet none nor all of these things on which the cow feeds injuriously affect the making of cheese, for the reason that the rennet necessary to form the curd, gives so sharp and different a taste, that all others are neutralized. The work of making butter is not completed when you have everything necessary for the cow to feed on; you must provide a good spring house where every breeze is sweet as that wafted from the rose itself; and everything not only cleanly, but the butter milk must be worked out; and when that is done the working must cease. A little too much working spoils the grain and it becomes oily, and is only a second or third rate article. Salt must only be used in sufficient quantities to make it palatable, as salt is not necessary to preserve butter any more than it is to keep lard. Be sure to use Liverpool or Turks Island, as no other Salt has stood the test, although Onondaga saves pork just as well, and beef and butter reasonably well for immediate use; but for keeping until next spring, it is not so good, as its flavor is lost. Great care should be taken in selecting salt, as the manufacturers at Syracuse, have become very expert in grinding and putting up their salt in imitation of the Turk's Island and Liverpool, and yet the butter when salted with Onondaga salt, after lying six months in packages, never fails to disclose

the fact by a loss of two or three cents on the pound to the manufacturer.

The superiority of rolling land for pastures, is attributed to the ready drainage, preventing the mildew of the grass in rainy seasons, so injurious to the flavor of butter. Would not a thoroughly tile-drained pasture possess all the advantages of a hill-side?

On the subject of the profits of keeping cows, and the management of permanent pastures, we quote the following remarks:

A first rate cow well cared for, will make 200 lbs. of butter in a season, that is one pound a day for two hundred days, and that at 25 per pound is \$50. Her milk will make 100 pounds cheese worth six dollars more. We will call three acres sufficient to keep one cow a year, which is a large estimate for good grass land. This is better business than can be done on the best wheat land in the country, with this advantage, that every year the farmer uses his farm for grazing it is improving; if like these grass-lands in sight, they will improve at least five per cent a year in the productiveness, if properly used. I do not want to hear a farmer say that on such land, his meadows or pastures are running out. I can only say to that farmer he does not understand his business; and if he will sow one bushel of plaster on each acre of land, every year, and not pasture his meadows after mowing, neither in the fall nor in the spring, nor turn into his pastures until there is something for his cattle to eat, he will in a very few years have meadows that will average two and a half tons of hay to the acre; and one acre and a half will pasture a cow through the season, and two and a half acres keep a cow the year. In twenty years by this system of farming, dairy lands now, would become fatting lands. And what I mean by fatting lands is where the pasture is so nutritious that steers will fat in pasture, from the 10th of May until frost affects the pasture in the fall, as fast as the most skilful feeder could fatten them, on the best of hay and as much grain of all kinds as he chose to feed them. That I call fatting land. Of this quality of land there is far less than of dairy lands, and it is more scattered, yet they are the best dairy lands in the world, where the water and climate is good, and no offensive vegetable grows with the grass.

On the subject of permanent pastures, we are not surprised that there should be some difference of opinion, and that many graziers should esteem them so

much superior to those more frequently seeded down. A remark in a subsequent part of the address serves to explain the reason of this reputed superiority. The stalks of the hay from new meadows we are told, are "coarse and hollow, and but little better than straw,"—which is wholly in consequence of the sowing grass seed too thinly. Apply half a bushel of seed per acre, and the crop will not only be doubled in quantity as we have proved by experiment, but from its thick and fine growth, it will be greatly increased in quality.

The following is a large story,—on the productiveness of cows, but as it is given on good authority we quote it as we find it; and we hope our friend of the American Agriculturist, who wholly discredits the account of the celebrated Onkes cow, (as we see by a late number of that journal) which was claimed to give but about 16 lbs. of butter per week, or 6 lbs. less than these, will examine into this matter, and either procure authentic evidence of its correctness, or establish its error.

I have made forty-four and one half pounds of butter from two cows in seven days; more than three pounds each, per day. They were well wintered and were fed back not only their own, but as much other milk, as they would drink. Their average weights of milk per day, was over fifty-four pounds. They were the best out of a lot of more than two hundred dairy cows.

We close these these copious extracts from this address (which we trust will not be found to contain a word too much) with the following valuable directions for preparing butter for market.

I think I did not add more than half a pound per day each in the quantity of butter, by feeding back the milk, as it was at the time when the pasture was at the very best. This extra feed would have kept this large quantity up when the grass was not so good.

The butter was good—but not of the first quality, not so solid nor as highly flavored as that made on pure grass. I am thoroughly convinced that nothing that has ever been tried will make the very best of butter, except the grasses which I have mentioned. The butter made on the sweet scented vernal grass is good as any when first made, but like that made from red clover when laid down in packages loses its flavor.

If the first quality of butter could be made from any or all kinds of roots, the Dutch would have succeeded in this, as they are, to say the least, as neat and untiring in their pains to accomplish this object as any people on earth. Although their butter is good and brings the highest price in London market, yet it is not of the best quality, and never brings within five or six cents the pound of the highest price of our very best butter, nor do I believe they make much if any, of the very best butter in England. Of this however, I do not pretend to know, and only speak from facts that I have witnessed in the market as a dealer and maker of butter. Last season when butter was very high there was large quantities imported. At that time nearly all the steam vessels, purchased in the New York market, of our best butter for their own use, not only for their out, but for their return voyages—whilst we were exporting Southern Ohio, Indiana and Illinois butter, not worth more than lard in our markets. If the English make the best of butter, the Holland butter would not bring the very highest price in London Market any more than in New York.

The Holland butter brings in our Southern market the highest price, as none of the very best dairies are shipped to Charleston, Savannah or New Orleans; as there is a great demand in New York for all of the best quality of butter made, and room for more. To make this butter you must churn all the milk as well as cream, and churn it before it sours, as the sour or rancid taste in the cream can never be eradicated from the butter. A horse is the best of all animals to churn, and no matter if he churns six hours, as the milk should be churned sufficiently cool, which should be tested by a thermometer, to have the butter come solid.

Firkins, before butter is put into them should be soaked in strong brine, then filled with sweet hay and hot water, and be allowed to stand until the water is cooled. When the water is filled, put a cloth all over the top, cover it over and keep it well covered with a brine made of salt, salt-petre and loaf sugar, until it is sent to market. When you have done all this, procure a tryer, and before sending to market, try every package, and if, at any time, your cows have eaten any roots, cabbage or anything else they should not, you will find it in the butter. Go to market with your butter, and sell it yourself, and take your wife along, as she is the best judge; as ladies rarely smoke or chew tobacco, and no man that does either, can detect the finer flavor of the nicer qualities. Thousands of men and women have lived and died in good dairy countries, and never tasted a first rate article of butter in their lives.

I said go to market with your butter, yourselves, and secure a customer; if your butter stands the test, you will not have to go the next season. The factor who handled it the last year, will be anxious to buy your butter again, as he likes his customers who do not regard the price, if the butter exactly suits, and the last year's butter, if good, establishes your character as a butter maker, and will enable you to obtain a penny a pound over the last year's prices.

#### St. Clair Co. Agricultural Society.

Let our farmer friends bear in mind that there will be a meeting of the Agricultural Society of this county held at the Courthouse in this city, on Monday next, the 14th inst. From present indications, and from what information we have received from various parts of the county, we are convinced it will be one of the largest assemblages ever convened in St. Clair county, for the advancement of agricultural and mechanical interests. The working men are waking up to the importance of this movement, and seem determined to push the matter through with an energy that will confer credit upon our county. Let each one, then come to the meeting next Monday, resolved to vote in favor of having a county Fair about the first of October; let that be well attended, and let the Exhibition be well supplied with the best productions of the farm, the workshop, and the warehouse; let suitable premiums be awarded to encourage competition; and let such arrangements be made as will secure a permanent organization. Then let a committee be appointed to attend the State Agricultural Fair at Springfield, commencing on the 12th of October, and as many members of the County Society as possible attend the State Exhibition. In this way our farmers, mechanics and manufacturers will be enabled to bring their products and wares before the people of the whole State and of the entire West. For good horses, cattle, sheep, and for products generally, it is well known that the farmers of "Old St. Clair" cannot be surpassed by those of any other portion of the State; and the mechanics and manufacturers of Belleville are inferior to none in any other city of the Union. Then let these cattle and farm products, and manufactured articles, be exhibited at State and County Fairs; and their value will be greatly enhanced, and the benefits accruing to the producers will, in a short time, ten fold remunerate them for the expense incurred in getting up the Exhibition. We trust there will be no holding back in this matter, but that each man will recollect that he is expected to "do his duty" in the premises.

*Belleville Advocate.*

### What Shall we Eat?

It meat were furnished as cheap as water, it would be deemed too severe a task to eat it, during such hot weather. But when it costs so enormously, and has no special merit of wholesomeness to commend it, we certainly should be excused from its use. Still, if one has the money to spare for it, we will not object to its answering very well to keep the body in respectable condition. Beef, more than any other meat—providing it is a healthy animal, and is not too tough—is wholesome. But then it is not needed by most people in the summer. On the other hand, the meat eater must sleep longer than the one who lets it alone. We doubt not that men who eat no meat get as much good out of six hours' sleep as they who eat it do out of seven. If so, here is a double waste—of money for the article and of time to get over its effects.

But there is a class of alarmists who cry out against vegetables whenever an epidemic threatens to approach. They are strong enough in some cities to have secured the prohibition of the sale of vegetables in the markets and groceries, while the cholera prevailed. Their intentions were good, of course, but we shall not believe that ripe, fresh vegetables will prove injurious to mortals any more during an epidemic than at other times. Of course, unripe fruit, wilted and decaying vegetables, or unseasonable ones, will not be consumed with impunity, but we speak to sensible folks.

Potatoes that are potatoes—we mean potatoes that are not made up simply of a squash pulp, with half their weight in water, surrounded with a dirty peel; but such as we occasionally find in market under the name of Pink Eyes, or the Bermudas, which are plenty now, and the Mercers, which are always so, are good enough for the best conservative in town. Turnips are good, though there is not much nourishment in them. Cabbages, Spinach and "Greens," of all sorts are good only for those who never have found them indigestible. They should be eaten only under protest.

Rice is excellent, in milk or with sugar.—Do not hinder the children from using the sugar freely. It fattens the chattles of the south and will fatten them. Never believe that their teeth decay in consequence. Milk is excellent. It satisfies the appetite, is light, wholesome, and cheap. Boiling the milk improves its flavor, ripens it, and makes it easy of digestion even for the sick. Simple puddings, fruit puddings, and pies, if not too rich, are economical and good. Then fruit in its season is worthy of thanksgiving. Strawberries are so plenty that they can better be afforded than meats, and they are as wholesome, as refresh-

ing too. Bananas now abound. Those which are perfectly ripe and not at all decayed, are safe. Pine apples furnish the palate with perpetual illusion. You lay hold of one, and its delicious flavor promises great pleasure to the palate, but it seems to fail of meeting the demand exactly, and though you stuff with the woody fibrous body of the apple till your judgment forbids any more, you still experience a craving for it. They are not worth what they cost to common folks.

Flour is the staple, after all, in bread and biscuits, cakes and puddings, the good housewife can manage to give flour a relishing and wholesome form, though varied daily. Moreover it is about as cheap as anything we eat, in spite of the high market prices. Corn as Indian, corn as hominy, or corn as samp is a National dish. Patriotism, economy, health and a Yankee education all combine to recommend it in all its forms, excepting perhaps that very delectable combination of it with beans, which men in honor of the aborigines still designate *succotash*. Given in a desert, corn enough and the usual facilities for preparing it for the table, and no man has a right to ask for manna or quails. Cucumbers and their kind are very dubious; never should one eat freely of them, and if they ever have played a person a trick, he will do well to avoid them utterly. It is a great pity that their pleasant flavor could not be extracted and communicated to some such harmless medium as mush, rice, or Indian meal. If the Crystal Palace does well in its legitimate and promised work of stimulating human industry in all directions, perhaps it may be yet. We shall not patent the suggestion. Eggs fortunately fetch prices that can be afforded. They are very nutritious and very digestible, unless cooked to the consistency of bullets. We suspect that egg-fed men make the best thinkers, meat-eaters the best fighters, and strict vegetarians the whitest and most delicate members of society. Physiologists say that the human brain hungers always for phosphorus and that when it is plentifully supplied thinking comes easy. Now phosphorus is plentiful in eggs, whence it seems to be a legitimate deduction that our suspicion is the truth.

Fish are for the edification of Men in hot weather; but they must be fresh fish—as recently as possible from the water. Look sharp before buying them on Mondays, and on Saturdays too; they are apt to be the unsold remnants. Some citizens make free with salt fish at this season. It is a grave objection to them, however, that they provoke thirst which must be quenched with immoderate draughts of cold water.—*New York Times*.



### The Drouth—Its Effect.

Observation and experience, are after all, our best instructors. And the effect of the late dry and exceedingly warm weather, though injurious to vegetation, may add something to our stock of useful knowledge. In our short journeyings "in the region round about us," we have endeavored to make such observations and inquiries as would be of some use to our readers. The crops, especially corn and potatoes, generally speaking, have been badly, though it is hoped not fatally injured by the want of rain. Some fields look as though a fire had passed over them, while others still hold out, as if determined not to disappoint the hopes of the cultivator.

The difference in the condition and appearance of different fields, may be attributed, in a measure, at any rate, to dissimilarity in soils; but this does not fully account for it. It will hardly escape the notice of any intelligent observer, that the difference in the condition of fields of corn and potatoes, is owing more to the different modes of culture than to any other cause.

As far as our observation has extended, where deep plowing and broad hills have constituted cardinal points in the mode of cultivation, the drouth has thus far done no material injury. On the contrary, both corn and potatoes, where the soil has been thoroughly prepared, and especially in cases where the hills are narrow, are in a condition by no means promising. This fact is worthy of consideration; for, although the season is too far advanced to admit of the application of any remedy adequate to the removal of the evil, a valuable lesson may be derived from it, which hereafter may be of essential service to our readers.

As a general rule there is no safer mode of culture than that indicated in the above remarks. Both corn and potatoes, require sufficient depth of soil to allow the roots to strike downwards, so far as to be secure from the intense heat of the sun, and so as to derive sustenance from the earth when the surface becomes dry. Broad hills, for the same reason, are far better than narrow, or sugar-loaf ones. Here is where *quantity* is as essential as *quality*—the crop requiring food of the right kind, and enough of it, besides a mode of treatment adapted to the exigencies of our climate and variety of soils.

Many of our intelligent cultivators are advocates of the plan of not hilling corn at all. That would be preferable to small hills, without doubt, because it would leave the roots to strike downwards, thereby protecting the plant from the bad effects of a protracted drouth—whereas, narrow hills, a few inches broad, can only serve to prevent the result, and keep

the roots in an exposed condition. In our opinion, where the soil is deep and of good quality, no hilling is required. If plowed only to the depth of six or eight or twelve inches, broad hills will be serviceable. But shallow plowing followed by shallow cultivation will be sure to result disastrously in a season like this.—*Ohio Farmer.*

### A Book on Implements.

FARM IMPLEMENTS, and the Principles of their Construction and Use; an Elementary and Familiar Treatise on Mechanics, and on Natural Philosophy generally, as applied to the ordinary Practice of Agriculture. With 200 engraved Illustrations. By JOHN J. THOMAS. New-York: Harper & Brothers, Publishers. 1854.

The title of this book will fail to convey to the mind any just conception of the true character and scope of the work. It is not, as many might suppose, largely occupied with descriptions of farm implements and machines, but what is of much greater value—explanations and illustrations of the scientific principles upon which the construction and use of implements and machines are founded, and a correct understanding of which is of the utmost importance to farmers as well as mechanics.

The author, John J. Thomas, has been for nearly twenty years connected with the agricultural press, first as associate editor of the *Genesee Farmer*, and latterly of the *Albany Cultivator* and *Country Gentleman*, with a mind naturally inclined to scientific and mathematical studies, and great fondness for agricultural and mechanical pursuits, combined with unusual opportunities for observation, he possesses rare qualifications for a work of this kind.

Our only regret is that he felt compelled to restrict himself to a volume of such limited size, in order that its price might not be made an objection. We are confident that most of those who purchase and read the book will wish that many of the chapters had been extended to twice their length, even though the price had been doubled. We heartily commend the book to our readers, especially to young farmers; and every farmer's club and library should of course procure it. The price we presume is \$1. The following is an extract from the work:

INTRODUCTION:—BENEFITS OF MECHANICAL KNOWLEDGE.—No farm, even of moderate size,

can be well furnished without a large number of machines and implements. Scarcely any labor is performed without their assistance, from the simple operation of hosing and spading, to the more complex work of turning the sod and driving the threshing machine. It becomes, therefore, a matter of vital importance to the farmer to be able to construct the best, or to select the best already constructed and to apply the forces required for the use of such machines to the best possible advantage.

A great loss occurs frequently from the want of the correct knowledge of mechanical principles. The strength of laborers is often badly applied by the use of unsuitable tools, and that of teams is partly lost by being ill-adjusted for the best line of draught; as for example, by a bad attachment to the plow for forcing its wedge-like form most effectually through the soil. We may perhaps see but few instances of so great a blunder as the man committed who fastened his smaller horse to the shorter end of the whipple-tree, to balance the large horse at the longer end; or of the other man, who, when riding on horseback to mill, stop of his bag of grain, concluded to relieve the animal by dismounting, shouldering the bag himself, and then remounting; yet cases are not uncommon where other operations are performed to almost as great a disadvantage, and which, to a person well versed in the science of mechanics, would appear nearly as strange and absurd.

The improvement of farm machines and tools within the last fifty years has probably enabled the farmer to effect twice as much work with the same force of horses and men. Plows turn up the soil deeper, more evenly and perfectly, and with greater ease of draught; hoes and spades have become lighter and more efficient; grain, instead of being beaten out by the slow and laborious work of the flail, is now showered in torrents from the threshing machine; horse rakes accomplish singly the work of many men using the old hand-rake; twelve to twenty acres of ripe grain are neatly cut in one day with a two horse reaper; wheat drills, avoiding the tiresome drudgery of sowing by hand, are materially increasing the amount of the wheat crop; while a few farmers are making a large yearly saving by the application of horse power to the sawing of wood, churning, driving washing machines, and even to ditching. A celebrated English farmer has lately accomplished even more; for, by means of a steam engine of six horse power, he drives a pair of mill stones for grinding feed, threshes and cleans grain, elevates and bags it, pumps water for cattle, cuts straw, turns the grindstone, and drives liquid manure through pipes for irrigating his fields; and the waste steam cooks the food for

his cattle and swine—all of this work being performed in a first rate manner.

Now these improvements were mainly effected through the knowledge of mechanical principles, and many of them would doubtless have been sooner achieved and better perfected if these principles had been well understood by farmers; for, constantly using the machines themselves, they could have perceived just what defects existed, and, by understanding the reason of these defects, have been able to suggest the remedies in a better manner than the mere manufacturer. Moreover, as the introduction of what is new and valuable depends greatly on the call for them, farmers would have been prepared to decide with more confidence and certainty upon their real merits, and thus to increase and cheapen the supply of the best, and to reject all worthless.

One great reason that farm implements are so imperfect, is that the farmers themselves do not fully understand what is needed, and how much may yet be accomplished. They have not enough knowledge of the principles of mechanics to qualify them for judging of the merits of new machines; and being afraid of imposition, often reject what is really valuable, or else, being pleased with a fine appearance, are easily deceived with empty pretensions.

The implements and machines which every farmer must have who does his work well are numerous and often costly. The capital for thus furnishing in the best manner all the farms in the Union has been computed to amount to five hundred millions of dollars, and as much more is estimated to be yearly paid for the labor of men and horses throughout the country at large.

To increase the effective force of labor only one-fifth would, therefore, add annually one hundred millions in the aggregate to the profits of farming; while on the other hand, if we look back fifty years to the imperfect implements then in use, we may at once perceive the vast amount saved by the improvements since made; and when, especially, we notice the condition of barbarous nations, and contrast that condition with our own—the former thinly scattered in comfortless hovels through far-stretching and gloomy forests, subsisting mainly by hunting and fishing, and often suffering from hunger and cold; the latter blessed with smooth, cultivated fields, green meadows, and golden harvests, interspersed with comfortable farm houses; with the hum of business through populous cities, and along far-reaching lines of canals and railroads, and ships for foreign commerce, freighted with the productions of the soil, threading every channel and whitening every sea—when we observe this contrast, we can-

not fail to be struck with the convincing proof that "knowledge is power," and of the loss sustained on the one hand from its absence, and the advantages on the other of availing ourselves of its accumulated stores.

### Effect of the Drought on the Corn Crop.

We have become accustomed to make a large allowance in regarding the predictions made by "everybody"—that *knowing* personage—about the *threatened* "failure" of the growing crops for the time being; and considerable allowance must be made for newspaper announcements on the same subject. There is scarcely anything about which men are so much disposed to jump at conclusions and assume the worst state of the case, as when causes are at work which have a tendency to have an effect upon the farmers' crops. We have known the most fearful predictions of absolute deficiency to supply our domestic wants, made in all seriousness, before the harvest season, to be forgotten in the surplus which afterwards was found to have been produced.

With this experience to caution us, we have taken a view of the present state of things, arising from the prevailing drought and its effect on the growing crop of corn. In addition to what we have heard said about it, by many of our farmer friends of this county, we have carefully reviewed a score or two of newspaper notices on this subject. As usual, from both sources, we have the worst that can be imagined, held out as the result. An entire failure of the corn crop is spoken of by the majority. Others concede a partial result. Few allow us half the usual yield. To all this, we beg leave to submit our own opinion, and to try to encourage by our hopes, while others *croak* with their fears.

It is undeniable that an unusual drought is hanging over our section of the land.—From an examination of our exchanges we find this to be the case, in about the same range of latitude with this county, from the frontier settlement in western Missouri, eastward through that state, Illinois, Indiana, Ohio and extending to the Alleghany mountains in Pennsylvania. The limits of this range, thus deficient of rain, are easily traced by the newspaper accounts. No complaint comes from the extreme northern counties of this State, while the Wisconsin papers speak of a superabundance of rain in that section. To the south, we learn from a Memphis paper the corn crops of Tennessee are unusually fine and promising. So then, even if the corn crop of the "Egypt" of Illinois, and of the territories round about suffering from want of rain, should entirely fail, there are other lands which could supply

our wants, not only in abundance, but with the aid of steamboat and railroad transportation, at prices very little enhanced on account of our deficient products of the same grain. But, will the corn crop among us be a failure? Is it fair to apprehend, even, such a diminution of the usual yield, as materially to change the supply and consequently the price? We think not. And we reason from the nature of this class of our agricultural products, and from the variety of soil and characteristic favor its growth and its yield. A study of these points which will teach us, that, whatever may be the peculiarity of the season, there will be both partial and total failures of fields planted in corn. One season may favor a clay, and another a sandy soil; and the locality of one field may need much wet weather, while in another the crop would be a failure from the same cause. And thus, either a wet or a dry season will produce an average crop. Experience however proves that a hot and dry summer is more favorable to an average crop of corn, than a cold and rainy season. And this is in accordance with the valuable investigations of Prof. Leibig, in his works on Agricultural Chemistry. He makes it appear, that the living structure of this class of vegetable organism depends as much, if not more on its absorption from the elements of the air, as on its extraction of vital forces from the earth. It wants a heated atmosphere. Experienced and observing farmers are wont to modify their complaints of warm weather and sleepless hours, by saying—Hot nights make the corn grow! Corn, like the *cactus* species of tropical climates, takes but little root in the soil, and in a manner as if it was more for the purpose of giving it a mere foothold so as to stand upright, than to feed exclusively on the substances of the earth. But, we have not room, even if we possessed the ability, to write at length on this interesting subject. We design merely to give a reason why we do not despair in looking for at least a fair yield of this very valuable product, in this county, notwithstanding the dry weather.—We hope some of our farmers will deem our observations worthy of consideration, and that some of them will note the result and be prepared to make some facts known that will throw light on the subject. It might afford an interesting theme for discussion at one of the meetings of the Agricultural Society.

—Belleville Advocate.

### Buckwheat.

This crop, though last to be sown, is not by any means the last in importance. As it can be got in at a time of comparative leisure (from the 10th to 20th of June,) and as it will

grow on almost any soil, even if indifferently prepared, it is, in all things considered, many times one of the most profitable crops. And who that has tasted "hot buckwheat cakes on a cold frosty morning" will deny that they are among the luxuries of the table? If the grain is of fair quality, there is no good reason why the meal should not be as white as the flour of wheat; if it is not, the fault is in the grinding.

As feed for horses, when ground it is excellent, and for cows that give milk in the winter, there is nothing superior. Were its merits for this use better known, they would be more fully appreciated.

Dairymen, try it. When mixed with other grain, it is also good for fattening hogs.—Chemists tell us that it does not contain the elements of fertility in as great abundance as clover, and according to their theory, it is not as valuable as a green crop.

But the writer has tried it on a tough sward, with eminent success—the benefits, no doubt, partly arising from its mechanical action in pulverizing the sward, and for this it stands pre-eminent; it is superior even to peas. c.

REMARKS.—It may possibly be superior to peas for mechanical action in tenacious soils, but that it is superior to peas for fertilizing purposes, is to say the least, contrary to many well attested experiments, and contrary to general opinion, among experienced men.—will our esteemed correspondent give us his experiments more in detail?—*Rural N. Y.*

#### Curing Hay.

We find in the *Middlebury Register* of 12th July a valuable article on this subject from S. JEWETT, Esq., from which we make the following extracts:

In our opinion, there is a great mistake existing in this matter. It is an old adage, "Make hay while the sun shines," and many seem to think that the more sun they can get upon their hay the better. Here is the mistake to which we allude.

By this process of over drying in the sun, a great many tons of hay are lost. The influence of the sun is partly that of distillation, and has the power to expel not only the watery elements contained in plants, but the real substance of the plant itself, which goes to form fat and muscular fibre of all ruminating animals. It is asserted by distillers of plants, that to procure the most oil, they must not be dried in the sun, as it not only lessens the quantity of oil, but also diminishes the flavor.

Now, grass may be exposed to the influence of the sun's rays, until there remains but the woody fibre, until there is no more nourishment in it than there is in a pile of wood.

Thus, from one tenth to four fifths of the nutritive part of hay is lost by the maker in the process of drying, or what might be more

properly called a process of distillation. We have reason to believe that in Vermont alone there is lost during one season, in this way, more than five hundred thousand dollars' worth of nutriment in hay; which if it had been wisely retained, might have nourished many hundred flocks and herds, as nature designed it—instead of being resolved again into its constituent elements, and wafted away by the winds.

When the hay maker is desirous of stacking his hay a little underdone, he may do so with impunity, by adding layers of dry straw or old hay, occasionally, to absorb the gases which would pass off by over heating or in the field, under the influence of sun and air. Much value, in this way, may be saved, as stock will eat the straw and old hay with avidity, though it may have been second quality.

Another good method of storing your hay, as green as possible, is by providing several places so that but one or two loads may be put together the same day. By this gradual process of storing the hay, it will be richer in quality, if not over ripe.

When the hay is not made enough to save well by stering in large bodies, it may be cast on to an open scaffold or remain on the load, over night, to sweat. All hay under done, should be pressed as light as possible in mow or stack, but when over cured or too ripe, the more solid it is pressed at unloading the better.

To make a stack of hay properly, it should be several days in going up, that you may be able to retain its good virtues and give the stack time to settle by degrees.

Grass should be wilted then, without dew or wet, and put up into cocks, not by rolling, but by placing one fork full top of the other. When the grass gums the sythe in cutting, it requires little or no drying before it goes to the barn, if stored with proper care. Hay may heat in the mow; to a certain extent, and not be rejected by stock, and is not apt to must or mould in small bodies, if the water is thoroughly dried off. When hay is liable to overheat, it should be turned up to air, or a square pit cut out of the centre to check it.

A chimney is sometimes formed by setting bundles of straw on end one top of the other, commencing near the bottom of the stack, or mow ending near the top. When over dried, as before stated, it never becomes solid in the mow. That fed from the solid mow, is of more value, and will go much further, pound for pound, than that fed out of the loose hay in bulk.

Every stack or mow, divided by the hay knife, will keep more stock, fed in the fresh state, than from the larger surface, which is constantly exposed to the distillation of the air. For the same reason, when moved in the winter, it does not spend as well.



From the Cincinnati Gazette.

**The Grape Culture—Manufacture and Bottling of The Native Wine.**

We have just enjoyed an afternoon in viewing the vineyard, &c., of George and Peter Bogen, in Springfield township, beyond Carthage.

On a beautiful knoll, gradually shelving down to where the railroad crosses the Carthage turnpike, and immediately adjacent to the City Infirmary building, the Bogens have their excellent vineyards and wine cellars.

On Saturday afternoon last, with a party of gentlemen from the city, we were the invited guests of Mr. George Bogen, at the house of his son-in-law, Mr. Moeller, on the farm spoken of. By the gentlemanly attention of Capt. John Marsh, Mr. Bogen's right bower in other extensive business matters in the city, we were shown through the main vineyard of 15 acres. It crowned the eastern and southern declivities of a knoll shelving down from what we denominated log cabin point, making a beautiful curve of the green thicket of vines as we have elsewhere seen. Those closely observing the grounds will perceive four rows of stone terraces seven feet high, built in a solid and finished style, making walks four feet wide in the foundation, and three feet on top. The steps are finished with boulders, and the walks solid, and well fitted to permit access to the vines.

From the early rains in the spring, the grapes were affected by rot, and a half crop only will be realized. The osier willow is raised on a wet place on the farm, and used to tie the vines to the stakes. The messrs Bogens have attained a wide spread popularity for the manufacture of their excellent wines, we take pleasure in speaking of some things observed by us at their extensive establishment, as we passed through it in company with W. H. Comstock, of the city, and Isaac, Ephraim and Henry Bates, of Millcreek township. Two stone buildings, of 100 feet each, divided into commodious apartments, have been erected adjoining the stone mansion, the very home of comfort.

**THE PRESS.**—The grapes when fully ripe are borne to these buildings, in one end of which is the wine press, which, kept scrupulously neat and clean, crushes the fragment grape, much like the cider mill does the apple. The crushed grapes are called "cheese," and the juice expressed, "must." The last runs off into a large receiving tub and put into a new, or rather what are called *wine green* casks, and stored into deep cool cellars. The press, vessels and casks, are as clean as they can be kept, so as not to lose the fruit's aroma of the grape. The skin and seed after being pressed is called "pomace," and is dis-

led to make brandy or used as manure. The must of three pressings, if preserved separate, makes different flavored wine, but the whole is generally pressed into one receiving tub.

Inferior wines are often made of that last expressed, none of which the Bogens sell.

Twenty-four hundred vines are generally raised to the acre, and a heaped bushel of grapes will make three gallons of juice.

**THE CELLAR.**—Few of our readers have an idea of the extent of the underground cellarage required to keep wine that has no admixture of alcohol, from a rapid vinous and even an acetous fermentation. The casks are filled up within five or six inches of the bung, and the bung put on loosely. The gas escapes without the wine running over. In three weeks the fermentation ceases, and the casks are filled and the bungs tightened. A gluten exists in the juice of all fruits, which in the first fermentation of wines; becomes turbid, and this yeast floats about, and the wine in February or March has to be racked off and put into clean casks. The astonishment of the "dwellers on the earth" is variously expressed by those who descend a double flight of stairs into an immense subterranean cavern of vast stone arches, which support the roof over a cellar one hundred and sixty feet long and thirty feet wide. Ranged along in these cold recesses where the temperature is down to fifty-two degrees, are mammoth casks, containing two thousand gallons, one thousand gallons, five hundred gallons, and others of smaller dimensions, their shape is not circular but oval, highest from top to bottom.

Wine is best kept bottled, which is never done before the second fermentation, nor is it sold unless two years of age.

**THE BOTTLING.**—No bottles for the sparkling Catawba are made in this country, they are imported. We hope Yankee ingenuity, at home, will soon succeed in cutting off this foreign trade. The brand of B. & T. Bogen, we learn, is equal to that of any other in the market; there is now in their cellar 100,000 bottles of wine.

By machinery the cork is pressed part way into the bottle and a dexterous person ties and wires the upper end of the cork. Some twenty months is required to ripen the Sparkling Wine, which in the mean time, is placed at different angles of depression or frames, and gently shaken daily to precipitate the yeast down to the cork, which, at a proper time is opened and dexterously released from the bottle and re-corked.

The Still Wine or Hoek, is kept in bottles well corked and sealed, and laid on their sides in a cool place.

"The grape, before long, must prove a most important source of national wealth, not to be

estimated merely by its commercial value, but rather by the grand result arising from those gentle but certain influences which cheap and unadulterated wines exert in favor of temperance. Intoxication is a rare vice in wine-growing countries. This is proverbial. The root of intemperance lies in impure liquors. Supplant them by wine, so cheap that the humblest cottager may have his well filled flaggon before him at dinner, and drunkenness, with all the horrid crimes that follow in its train, will soon disappear."

### Origin of the Wheat Plant.

Some curious botanical facts have recently been laid before the French Academy relative to the transformation of two grasses, *Egilops ovata* and the *Egilops triaristata*. A gardener, M. Esprit Fabre, of Adge, in France, has, without the aid of books, and by simple experiment, brought forward a capital fact; showing the mutability of vegetable forms. By experiments, which occupied seven years' time, he proved that the above grasses were capable of being the source of all or the greater part of our species of wheat. He first sowed the seed of the *ovata* in the fall of 1838. In 1839, the plants grew to a height of two feet, and ripened in the middle of July. The ears here and there had one or two grains in them. The crop was five for one, and the straw was brittle and thin. In 1840, the seed of 1839 produced ears more numerous; and generally each contained a couple of grains of an appearance more like wheat. In 1841, the ears were more like wheat, and each had from two to three grains. The figure of the plant was almost like wheat. In 1842, the fourth year of his experiments, the progress was not so sensible as in the previous year. Many of the plants were attacked by rust. The stalks were like *Egilops*. The ear gave two or three grains each. In 1843, the stalks grew three feet high. In each ear was two or three well grown grains, and the straw was stronger. The figure of the plant was like wheat. In 1844, all the ears were filled. In 1845, the seventh year, the plants had reached the condition of true wheat. These experiments were made in an enclosure surrounded by high walls. There was no grass inside of it, and no grain raised near the spot. On 1841, he sowed his grain in a field broadcast, and continued in four years. In 1850, the straw was full straight, over two feet high, and each ear containing two or three dozen of perfect wheat. Thus a savage plant, subject to cultivation, changed its entire figure and aspects, and gradually assumed a new character.

Among the recent French inventions, is one for "increasing the produce of autumn

wheat," patented by Mr. D'Urole. The inventor grounds his discovery upon the fact—positively ascertained "by study and repeated experiments"—that autumn wheat is not annual, but biennial, like the beet-root and carrot class, and he therefore proceeds to develop the alleged biennial properties by a novel plan of planting and treatment, for the increase of the produce. The ground is to be well manured, either before winter or at the beginning of spring, to receive the seed between the 20th of April and the 10th of May, this time being chosen to prevent the chance of blossoming during the year. But the time of sowing was be advanced from year to year; for, if it were not for the present degeneracy of the plant, it might occur now in March. Each grain is sowed separately, allowing it a large area of ground if the soil is rich, but diminishing according to its sterility. It is deposited in rows in holes at regular distances, from 9 1-2 to 23 1-2 inches asunder in each direction, the holes in one row, opposite the spaces in the next. Each hole is to contain four or five grains, 2 1 2 inches asunder. When the plants have attained a height of four inches, all but the finest one in each group are pulled up, and this single one is then left for the harvest of the succeeding year. This curious process is stated to increase the produce very greatly.—*Annual of Scien. Dis.*

### Agricultural School in Pennsylvania.

The State Agricultural Society of Pennsylvania recently recommended the establishment of a Farmers' School, in which should be taught "the English language, mathematics, geography, chemistry, botany, astronomy, and such other kindred subjects as are practically useful; and with these the art of farming."

The Pennsylvania Agricultural Society estimate that they have been induced to recommend the building up of such a school in that State, because their institutions of learning, as at present constituted, are not adapted to the education of young men for the business of agriculture. It is asserted that, at these institutions, the expense of education is too great, and the course of instruction unfits the student for the occupation of a farmer. On this point, the President of the Society says—"The body, by an uninterrupted application to books, at a period of life when the habits of a man are formed, is rendered, in a measure, incapable of labor; and the mind is trained to an inclination and course of thought ill adapted to the practical operations of the farm. But a school for the education of Farmers may be so organized as to avoid these objections. It is not proposed so thor-

ought to educate young men, as to fit them for the pursuit of scientific subjects; but to teach them what is valuable for a farmer to know. Certain hours of each day should be devoted to the manual labor of the farm, and to the construction and use of implements. This labor, well directed, would be productive; and thus, the institution would be in a measure self-sustaining."

It will probably become the duty of the next Legislature of the State of Indiana to decide some important questions in relation to the opening of an Agricultural Department in the State University.—*The Farm and Shop.*

### The Farmer's Homestead.

If now, finally, we go back with him from all these exterior liabilities to his own premises again, we shall need, by this time, to memorialize the farmer of what is required of him in his house. If the school has disciplined his thinking faculty and refined his taste; if the town meeting has awakened in him the exalting sense of citizenship; if the church has lifted his heart into communion with the father of all families, and inspired his conscience by the prophecy of life eternal, he will scarcely be content to live a driveling dullard life at home, to play the selfish tyrant in the little political economy of kitchen and parlor, or to be worse than an infidel by providing not for his own. By derivation, the significance of your common title husband-man, holds you to do something. Husband-men, I suppose, are not bachelor-men. Now, as Nature has done her part towards furnishing a husband-man, by making you a man, she seems to presume you finish the business by making yourself a husband. Husband, is house-band, or organizer of household life. Organize it by not only the sterling, homebred, domestic moralities, but by the binding charm of those thousand amenities that distinguish a cultured home from the barbarian's hut. The delicate angel of the beautiful knocks at your door and begs admission, as well as the strong angel of the useful. Is there the fine eloquence of order; is there the disposing touch of taste; is there the simple and just adorning touch of nature round all your door stones, in all your front lawns, on the walls and tables, and furnishing of your dwellings? How many hours of a spring would it take to embower your windows with all that is graceful in green foliage, and winning in floral splendor? Plant trees before you purchase Venetian blinds and painted pickets. You will carry a tenderer, and therefore a manlier heart in your breast all day, if you pass out of a genial circle through the fragrance of lillies, and roses, and hony suckles. See that the sons

and daughters are interlaced by bands more spiritual than gregarious bipeds. Let the harmonies of evening music weave their souls into some gentle and lofty sympathies, gaining the boys over from ruder pleasures and doubtful companionships by the pre-occupying satisfactions of a cheerful, courteous, and hospitable fireside. Starve your palate, if need ever wore for such denial, to stock your library. Raise the tone of farmhouse table-talk if you can, and let the ladies help, above stale gossip, common places of the day's work, and scandalous tattle. Hang the proceeds of your premiums at cattle-shows on the wall, not in battle scenes, or daubed millinery, but in the shadings of some pleasing picture that reflects a glorious idea or a heroic sacrifice. Household life is not to unfold into grace and moral levelness by accident, any more than the wealth of your garden or orchard. It must be cultivated. And I take it, Christianity speaks of that higher kind of economy as much as of butcher's meat and breadstuffs, when it pronounces him that provideth not for his own, worse than an infidel.—*Rev. F. Huntington.*

THE POTATO A HEATHEN.—A correspondent, more hurt than indignant, writes to us upon our recent disparagement of the potato—declaring it to be a household god which we have rudely thrown from his pedestal to set thereon the new idol of Hominy. This finding of a fictitious, yet plausible substitute for so genuine and valuable a staple of feed, will, he thinks, tend to lessen the interest in the growth and scientific study of it, and so diminish the prospect for the one indispensable dish on every table. We sit rebuked. Praised be potatoes for ever. But, in claiming any manner of *pious standing*—household godliness—for this vegetable, does how correspondent knows that he errs, and that *the potato is a heathen*? Does he know that it has been battled against by the church, as an unworthy infidel? We must inform him that Scotland at one time made the growth of the potato illegal, *because it was not mentioned in the Bible!* In an article on the history of it, (which we saw some time since in the *Quarterly Journal of Agriculture*,) this fact is stated among the hindrances to its introduction into Great Britain. It was first cultivated in the fields of England in 1739. But, for years afterwards, it was not admitted into Scotland, from the zeal of preachers, in declaring it an unholy esculent, blasphemous to raise, sacrilegious to eat. "Famine, at last," says the historian, "gave an impulse to the innovation, and during the latter part of the eighteenth century, the excellent qualities of the potato became generally understood."—*Home Journal.*

### Grass Seeds.

Last week we published an article urging upon the farmers in Kentucky the importance of saving their own Clover seed, and gave some statistics touching the quantity of seed sown in this State, and the amount paid for it by our farmers to other States.

**TIMOTHY.**—We have not the same means at hand whereby to determine the quantity of Timothy seed received and sold in this market the present season, but from facts which have come to our knowledge, we are safe in estimating it at 5,000 bushels, or at least one third more than the amount sold in any previous year.

The greatly increased demand for Timothy seed the present season may be attributed to two causes: first, to the greater quantity of land seeded to meadow, and second, to the total failure of the crop of Herdsglass Seed, from which our market is usually supplied. Our Kentucky lands are not so well adapted to the growth of Timothy seed as are the prairies north of us, owing to the foul growth that infests our meadows.

**HERDGRASS OR RED TOP.**—Hardin, Larue and Hart counties, usually produce sufficient Herdsglass seed to meet the demand in this market. Although generally free from other seed, it is not so well cleaned as the seed grown upon the New Jersey meadows, thousands of acres which produce nothing else. The crop in Kentucky last year, owing to the excessive drought at the time of jointing, was a total failure.

If the farmers who supply our market with this seed would bestow more care in preparing their ground by deeper plowing and more thorough pulverizing before sowing, and would adopt some of the improved methods of gathering the seed, they would not only increase the quantity but improve the quality of the crop grown greatly to their own profit as well as to the advantage of the purchaser.

**BLUEGRASS.**—The season for Bluegrass seed last year was more favorable than has been known since it has become a marketable product. This was owing to the warm and wet spring, and the subse-

quent dry weather at the time of gathering. The quantity saved in the Bluegrass counties of the State was, by estimation, about 20,000 bushels, a considerable portion of which found its way to other markets than Louisville. The crop this season is unusually short, but with the over-stock of last year, there will be an abundant supply for next spring.

By the improved method of cleaning or separating this seed from the chaff or stems, by a machine invented and patented in this city last year, the farmers are enabled to procure a much better article than that which is rubbed out after the manner now practiced by some of the dealers.

**ORCHARD GRASS.**—The demand for this seed has been steadily on the increase for a number of years past. Until the present season the supply has never been equal to the demand, and the price has consequently ranged high. This induced farmers to sow largely last year. The prospect of the present crop, however, is unpromising; yet from the amount of land seeded, it is likely that the supply of seed for the coming season will more than equal the demand at lower rates.

For harvesting this seed, Manny's Combined Reaper is found to be an excellent machine. It can be adjusted to cut the heads at any desired height, and after the seed has been secured, the stubble can be cut for Hay at the rate of ten acres a day by the same machine.—*Louisville Journal*.

### To Choose a Good Milk Cow.

Select from a good breed. We prefer the Devons—bright bay red. The Durhams are roan, red, white, and mixtures of these colors. Ayershire cows are generally red and white spotted. Herefords, red or darker colored, with white faces. Alderneys, pale red, and mixed with white. These are the principal colors of the several breeds, of which the Durhams are the largest and Alderneys the smallest. Different individuals will contend for each breed being the best and only one that should be selected for their milking qualities. But animals of each breed and of crosses of them, often prove remarkable milkers, and so do some of the native stock of the country. Two families of cows one owned by Col. Jacques, of Ten Hills Farm



near Charlestown, Mass., and one owned by Maj. Jones of Wheatland Farm, near Middletown, Delaware, were called native breed.

If we were about selecting a milk cow, we would endeavor to get one of such a herd of good milkers; one with a soft, velvety-feeling skin, slim neck, fine legs, broad stern, with what is called a large escutcheon, that is the hair of the stern pointing inward; a large udder slim teats and large veins, commonly called milk veins, on the belly. Above all things, select your cow of a gentle, pleasant countenance, because a first rate milker may be so vicious as to be worthless. Do not look for flesh, as the best cows are seldom fat; their hip bones are often very prominent, and they have the appearance of being low in flesh. A beefy cow is seldom a good milker.

The next thing is, what is a good milker? That is, how much milk must she yield per day? A cow that will average five quarts of milk a day through the year, making 1,825 quarts is an extraordinary good cow. One that will yield five quarts a day for ten months is a good cow, and one that will average four quarts is more than an average quality.

That would make 1,200 quarts a year, which at three cents a quart, is \$36. We believe the Orange County milk dairies average about \$40 per cow, and the quality of the cows is considerable above the average of the country.

It is as important to keep a cow good as it is to get her good. This can never be done by a careless, lazy milker. Always milk your cow quick and perfectly clean and never try to counteract nature by taking away her calf. Let it suck, and don't be afraid "it will be her death." It will distend the udder, and make room for the secretion of milk. Be gentle with your cow, and you will have a gentle cow. Select well, feed well, house well, milk well, and your cow will yield well.—*N. Y. Tribune.*

### Are Small or Large Sheep Most Profitable.

Ever since the days of far-famed M. Bakewell, of Dishley, Leicestershire, there have been two opinions, whether large or small sheep are the most profitable. The breeders of small sheep say, that an animal may be good and not great, and great and not good, and that size has nothing to do with profit.—It is not what an animal makes, so much as what it costs in making; and that a larger number of small sheep can be kept upon a given number of acres than larger sheep, the lesser sheep not consuming so much food per head as the larger.

The breeders of large sheep say that they

can produce more wool and mutton per acre by breeding large sheep than small; and that Mr. Bakewell lived when fat flesh or tallow made as much per lb. as lean flesh. Since that time, through the gas, one pound of lean flesh has made as much as two pounds of fat when pared off as tallow, and that there is more lean flesh in proportion on large sheep, such as Lincolns and Cotswolds, than upon the true bred Leicesters, that are now and have been famous for fat flesh, small bone, and a great propensity to fatten at early maturity. Many people have an idea that the sheep are all small that are bred in Leicester, which is erroneous: Last year I traveled through several counties to find wool, mutton and size combined. I found at Drayton-on-the-Welland, in Leicestershire, four miles from Rockingham Castle, 140 rams belonging to Mr. Byran Ward, an eminent grazer, who feeds yearly upon grass from 500 to 600 oxen, and shears 2000 sheep. Mr. Ward's rams have plenty of wool, size, and lean flesh, clipped all through their backs, with small, fine, thin heads, which denote a well-bred animal, and a propensity to fatten at an early age. Mr. Ward's sheep are styled by many, old Leicesters, because they have more wool and size than the pure bred New Leicester, and have a great semblance to the best long woolled Lincolns. There are now many flocks in the county of Leicester that have been crossed with Lincolns and Cotswolds, to increase size and wool; and there are many flocks left of what they style pure bred New Leicesters.—By the ram sales at Peterborough fair, last year, the Lincolnshire sheep seem to be gaining ground, as they made more money than any other kind of long woolled white faced sheep.—*Mark Lane Exp.*

### To Render Wood Incombustible.

A very excellent way to render wood incombustible, is to soak it in a strong solution of alum and sulphate of copper. About one pound of alum and one of the sulphate of copper should be sufficient for 100 gallons of water. These substances are dissolved in a small quantity of hot water, then mixed with the water in the vessel in which the wood is to be steeped. The timber to be rendered fire-proof can be kept under the liquor by stones, or any other mode of sinking it. All that is required is a water tight vessel, of sufficient dimensions to hold enough of liquor to cover the timber, which should be allowed to steep four or five days. After this it is taken out, and dried thoroughly before using. Various substances have been prepared for this purpose, but in answer to a correspondent we present the above as being equal to any that we are acquainted with.—*Sci. Am.*

## The Family Circle.

Conducted by  
Mrs. MARY ABBOTT.

### The Journey.

As we are about to set off on our journey it causes us many grave reflections. We have been some weeks in preparing for this journey—have we made as much preparation for that journey from which we shall never return? When people are about journeying they take much thought and make much preparation for it, but how little preparation is made for *that* journey we must *all* take? We are apt to live as though we had nothing to think of but the business and travels of this life, and the last long journey is too often forgotten by us all, and many are called to take it wholly unprepared. When we take a journey it is very bad not to be prepared with every convenience, but it is far worse not to be prepared for our last journey.

We are about to visit our early home and the city where our infant eyes first saw the light of heaven, and it calls up many pleasing and many painful thoughts. Pleasing thoughts—as we think of the happy days of our childhood and of our playmate brother, as we were engaged in the pleasant sports of childhood, when we think of the pleasant home in our father's house, and of an only sister, and of a group of brothers—when we think of these things we are happy at the thought of again beholding our native place. But sad, very sad, are our thoughts when we think that in that city we saw our first great trouble. In that city we lost our father—the guide of our youth, and there too we buried our only sister, who watched over our infancy, and was our councillor in our youth. There they lie—father, sister and a lovely brother, in that old burying ground, that our young feet have often trod

“There they lie and gently sleep  
Low in the ground.”

We have been so much engaged in preparing for our journey that we have not had

time to make this number as interesting as we could wish, but we hope if our lives are spared we shall make it more useful in future. As we are on our way we shall take note of everything that we think will be interesting to our readers.

### The Two Shilling Piece.

BY MRS. S. P. DOUGHTY.

There it lay—as bright and shining as any of its brethren, and to a merely casual observer as well entitled to the name it bore. And yet it was an unmistakable counterfeit, and an easily discovered one beside. When or where it was made—by whom or for what purpose we know not. At the time when we would first introduce it to our readers, it was with a quantity of other small change safely enclosed in the hand of a young man, who accompanied by a friend, sprang lightly from the steps of an omnibus, and took his way to the business part of the city.

“Nothing more provoking,” he exclaimed, “than being obliged to change a bill in an omnibus. The driver always grumbles, and rightly enough, too, for the passengers are annoyed at the detention, and the unfortunate individual who has forgotten to supply himself with a sixpence, runs the risk of receiving half a dozen bad sixpences or shillings, simply because he has not brass enough to keep a dozen waiting while he looks at his change. And here is a case in point. Just look at this quarter. As complete a counterfeit as you often meet with.

“It is indeed,” returned the friend, “Should you know the driver if you met him again?”

“Not I. He is but one among a thousand. Let him go. I will get rid of it. No fear of being a loser.”

“I threw its counterpart into the river this morning Harry.”

“And why? Push it about. It's worth twenty-five cents as long as you can get that for it.”

“Possibly; but the question is, where will it stop? In whose hands will it become valueless? Perchance in those of the widow or the orphan.”

“Pshaw, Dick. You are too deep into things. Take care of number one in the first place. Counterfeit money will be passed.”

“But I will not be one to pass it. Take my advice, and put that quarter where none shall find it.”

“I shall rid myself of it as soon possible,” was the equivocal reply, and the friends parted for the day.

Ten minutes after, the glittering quarter was with a quantity of other loose change

swept carelessly from the counter of a well known cigar store, and safely deposited in the drawer below, while its previous owner leisurely placed four prime cigars in his case, and well satisfied with the exchange, proceeded on his walk. It was a matter of too little consequence to cause anything more than a momentary feeling of vexation in the retailer of fine extra cigars, and best chewing tobacco, when the trick was discovered. It was only to keep it moving, and no one need be a looser. So it was passed off upon the first short-sighted customer, and he in his turn still deemed it best to keep it moving, and in settling an old account at his tailor's threw it in with the odd change.

So it passed from one to another, till, somewhat the worse of wear, it was lodged in a clothing store, where we will leave it for the present, and beg the reader to accompany us to another, till, in a clothing store, where we will leave it for the present, and beg the reader to accompany us to another part of the city, an obscure street, it is true, but where many honest hearts may be found.

In one of the poorest of the many poor apartments which formed one of those buildings often erected for the accommodation of the poor, sat a respectable looking, middle aged woman, busily plying her needle by the dim light of a tallow candle. There was an air of neatness in her appearance and in the room, which showed a sense of propriety not always found to accompany extreme poverty.

Two little children were quietly sleeping upon a straw bed in one corner of the room, and on a small cot lay another somewhat older, also slumbering, but with that uneasy restless sleep which evinces mental disturbance or bodily suffering.

The mother gazed tearfully upon her eldest born. In happier days when a kind husband had stood by her side to guard her from life's ills, Ella had been her darling and her pride; and even now, in want and sorrow, her bright smile and words of love could cheer the aching heart, and give new strength to the weary frame.

"Dear Ella," she murmured. "The fever is on her now; she will soon awake; poor child she needs much better care than I can give to her."

A distressing fit of coughing now awakened the little sufferer.

"Dear mamma," she whispered, as soon as she could regain her breath, "do lay aside your work for to-night. You have done enough, and you are tired. Lay down by me and rest."

"Not yet, dearest. It is still early. You know I must finish this work to-morrow."

"O how I wish I could help you. Did

I not begin to sew neatly before I was ill?"

"You did darling, and you will again before many weeks, I hope. But do not talk for it brings on that bad cough. Try and go to sleep again."

"I will mamma, but first give me water. My mouth is so parched."

The mother held the cool water to her lips. She drank a little, and then with a quiet "thank you," lay back upon her pillow but there was still a wishful look upon her countenance and her mother said tenderly:

"Is there anything else I can do for you Ella?"

"No mamma. I was thinking of that nice lemonade father made for me once when I was sick with the measles. It was very foolish in me to think of it," she continued, as she heard an involuntary sigh from her mother; "but the water does not taste good now that I am quite sick."

Again she slept, and the wearied mother resumed her needle. Tear after tear stole down her cheek as she bent over her task.

"Poor child," she murmured; it seems hard that I must deny her so trifling a luxury but alas! There are so many absolute necessities to be provided. Perhaps if I work an hour or two longer, I might complete another garment before to-morrow evening and then I should receive a little more than I expected. I must buy coal, for it is hard to make poor Ella comfortable with the blocks which the children pick up. I will go without the tea which I hoped to buy, and the dear child shall have a lemon and a little loaf sugar, as she did when she had the measles. Poor thing! how she remembered the lemonade which her father made for her.

Animated with the hope of procuring the luxury for her suffering child the weary fingers moved still faster, and it was not till busy sounds told the near approach of morning, that the task was relinquished, and the almost exhausted woman threw herself on the bed to seek an hour or so of repose. Every leisure moment of the following day was devoted to her needle; and early in the evening the work was completed. Fatigue was forgotten, and with a cheerful countenance she prepared to take the clothes to her employer. In the fulness of her heart she could not help whispering to Ella, as she kissed her burning cheek, "mother will try to bring you a lemon dear;" and though the unselfish child immediately assured her that she could do very well without it, yet the brightening of the eye and the look of gratitude only strengthened her resolution.

A quick walk brought her to the shop of her employer. The work was examined, approved and paid for. With a light heart she

turned toward home, holding in her hand the hard earned sum which was to procure so many comforts. To the coal yard first she went. Here her purchase was soon made, an obliging lad for whom she had frequently done many small favors, offered to carry the basket to her room. Some other necessities were bought and then the woman paused and gazed thoughtfully at the last piece of money which remained. It was a quarter.

"I think I can make out the fish for the children, yet," she said to herself, "but I must make sure of the lemon and sugar first."

She stepped into a brightly lighted grocery.

"Have you lemons?"

"Very fine ones," was the reply, "but they are very high at present. Sixpence apiece."

"Could you not let me have one or two a little cheaper. They are for sickness."

"Might let you have two for ten cents, perhaps, but it will be a dead loss to us. Don't make a cent profit on them."

The lemons and crushed sugar were bought and laid aside, and the remaining pennies would still buy the bit of fish. Almost exultingly the mother seized her treasures, and laying her quarter upon the counter turned to leave the store; but her progress was arrested by a loud call of—

"Stop, woman, this piece of money is counterfeit."

Tremblingly she returned.

"It was given me by Mr. Stimpson in payment for my work she said. I will leave my bundle here and go back with it to him. No doubt he will exchange it."

"I should think so," was the reply; for the perfect simplicity and openness with which the woman spoke, evinced her honesty.

The delay was tedious, but it was unavoidable, and as rapidly as possible she retraced her steps, and before many minutes again presented herself before Mr. Stimpson.

"Well, my good woman, what now? I thought your business was settled for to-night."

"Yes, sir, but if you please this is a counterfeit quarter. I tried to pass it at a grocery store, and they refused to take it."

The gentleman examined it closely.

"It is a counterfeit, certainly," he replied. "Are you sure I gave it to you? I am very careful what money I take."

"I had none but what I received from you, sir."

A doubt was expressed upon Mr. Stimpson's countenance.

After a pause he said coolly:

"I did not pay you myself, but merely directed the boy to give you so much. I will

ask him if this piece of money was among what he gave you."

"Here, William."

The lad obeyed the summons, and the piece of money was laid before him.

"Did you give that counterfeit quarter to this woman about half an hour ago?"

Of course I did not, sir. I never pass counterfeits nor take them."

"You see I can do nothing for you replied the employer, turning to the woman. "The lad knows what he is about and he says he never gave it to you."

"But I tell you I had no other money!" was the indignant reply.

"I have no proof of that so take your quarter and go away; you will pass it easy enough."

"But I will not pass it sir. If I am poor, thank God I am honest, and will not wrong another, even when I am wronged myself."

"What a spirit spoke there?" laughingly exclaimed Mr. Stimpson to a bystander, as with a firm step, though a despairing heart the injured woman quitted the shop, leaving the two shilling piece behind on the counter.

"A noble spirit," was the answer. "I can admire uprightness in another, even if I am not over careful myself. You were hard upon her Stimpson. The loss was more to her than it would have been to you."

"There would be no end to imposition if I did not protect myself."

"Perhaps so," was the careless reply; and at the same time the speaker took up the counterfeit quarter.

A slight mark attracted his attention, and with a sudden exclamation, he hastily left the shop.

"I wish I knew which way the woman went," he muttered, as he stood in the open air and looked eagerly around. "I know that quarter well. I set my private mark upon it the very day that the omnibus driver passed it upon me. I had some curiosity to see whether it would ever come into my hands again. Trueman was right after all. There's no telling where these things may stop I am sorry for the poor woman. She has the right stuff in her I am sure."

At this moment he saw the object of his search standing near the lamp post, a short distance from him.

"That must be the woman—what can she be doing there," he exclaimed as with hasty steps he walked toward her.

"Why do you stand in the night air, my good woman?"

She started as if waking from a dream, at the sound of his voice, and drawing her tattered shawl around her, moved quickly away. Unobserved he still kept sight of her.



At the door of the grocery she paused.—For a moment she stood irresolute. At length she entered, and her companion followed and stood beside her at the counter.

"Mr. Simpson will not exchange the money for me," she said timidly, "but if you would be so kind as to let me have the bundle and trust me for a day or two."

"Can't do it, good woman. Sorry for you but we go in for cash. No credit given."

"If I could only have the lemon," she murmured, but there was no encouragement in the countenance of the man she addressed, and sadly she turned away.

"It is so hard to disappoint poor Ella," she murmured, as she wiped the tears from her eyes, and slowly turned towards her own home. "I could bear all the rest. But thank God I have harmed no one. I will trust in Him. He will provide."

At this moment a hand was laid upon her shoulder and her little parcel was held before her.

Here is what you purchased, good woman, and here is another quarter for you an honest one I believe."

"God bless you, sir, whoever you may be?" was the reply; and then with a sudden burst of feeling, the grateful woman added.

"O, my poor Ella. She will yet have the lemonade. Excuse me, sir, but I toiled so many weary hours to procure these lemons and the sugar for the sick child, and then to be disappointed after all. It almost broke my heart."

"Here is something to buy Ella some more lemons," said the young man, slipping another piece of money into her hand.

And with a kind good evening, he walked away, well satisfied with the incident which had occurred, and with the secret resolution if another counterfeit came in his way, to abandon his motto, "Keep it moving," and remember that no one could know where it would stop.—*Flag of our Union.*

### The Cross of Suffering.

How many there are in this beautiful world who are called to bear the "cross of suffering!" Numbered among the earth's afflicted ones, yet we doubt not as much fulfilling their Master's will as those blessed with health—so meek, patient, and cheerful are they, with wills scarcely less blended into that of the Infinite, than the angels above. Angels they seemed to us—we can hardly realize, at times, that they are of the earth, earthly. Blessed visitants from heaven, to soothe, calm and attune our harsher spirits to the melodies of angels.

Such alone was Alice Warren—a sweet blue

eyed darling, whose lot had been lameness from infancy. Her golden ringlets fell over a neck and brow of snow. And when excitement had mantled her usually pale cheeks, as she wheeled herself in her chair to tell "mamma" of some sweet incident of bird or flower, there could hardly be found a lovelier child.

But little Alice was very lame. She could not run about and play with her merry troop of brothers and sisters, but would sit silently and watch them at their sports, until they grew tired and came to hear "Ally" talk.

Alice was the oldest in years, and from being incapacitated for household employments, was far older in intelligence. Whenever one of the little band was in a query as to the right or wrong of anything, "Ally" must always be consulted. Then, too, no one could assist them out of their difficulties in books, or work, or play, so well as "Ally." Yet Alice never attended school, and how she contrived to "know so much," as the children would say, with the instruction her father found time to impart, was a wonder to all.

Mr. Warren's father resided with him, and he used often to take Alice in his arms, and interest her with "Bible Tales." There was nothing Alice prized so highly as this privilege, but next to it she ranked her little testament at morning devotions. At length, when Alice was no more than five years old, her grandfather died. On the morning after his death, as the family assembled in the breakfast room, little Alice looked beseechingly at her father, and said softly, "Papa, who will read now grandpa is dead?" The Bible was brought, and its reading attended to thenceforward as formerly, though Mr. W. was not a Christian.

Time flew by, but brought no alleviation of suffering. Her sisters would tell of pleasant walks and sports, and wish "Ally could join them." "It is too bad you are lame," they would say. But Alice gently hushed the little chattering, and drawing them to her side; would tell them, "its all right, God is love." This seemed to be a favorite expression of hers, and often, when suffering pain, which increased with her years, she would say, "Mamma, it is all right, for God is love though he does send me pain."

Alice loved flowers, and took great delight in rearing them. But the "Great Reaper" loveth flowers too, and gathers the choicest for his garlands.

She was now ten years of age, and all through the past winter she had been gradually failing—and when spring came with woods and flowers, they would take her in their arms and carry her out to behold its beauty. She would gaze long and earnestly, and at length would nestle her head in her father's bosom,

and ask gently, "Papa, is not God love?" The father's heart was stricken within him: faintly he answered, "Yes."

By and by she was confined to her bed, and then, one bright spring morning, we were called to her chamber. Her blue eye was raised, her tinny hands clasped, as if in prayer—but no sound broke the stillness. Her mother laid a garland of fresh flowers on the pillow—she started—looked eagerly around, and gasped, as she said confidently, "Papa—mamma,—God is love." "Yes, truly," responded the parents, as they knelt by her bedside. The wish of her heart seemed gratified, and smiling sweetly, she sunk into an easy slumber, from which she awaked no more.

"My children," said the father, "let us pray to God, who is love;" and kneeling, he thanked God for sending him an angel to win his heart to him.—*Morning Star.*

From the Boston Cultivator.

### Flowers.

Flowers are the bright stars of man's existence. They are ever called to his aid, and their place is everywhere. They serve to form the bridal chaplet, and are laid upon the caskets of loved and loving ones! Thus they are associated with him in all the scenes of life. What is more pleasing to the sick, than a bunch of flowers culled by the hand of some dear friend, and sent to beguile the tedious hours? He constantly asks to have them brought near to him that he may inhale their sweet perfume, and as it were, gathers new strength to bear the sickness, sent by that Hand that woundeth but in love! They serve to lift our thoughts "from Nature up to Nature's God," for we cannot look upon things so beautiful without the thought, that they were formed by other than human wisdom. Many are the lessons we may learn from these types of angelic beauty. The glory of all earthly kings cannot compete with them, for even Solomon, the wisest and wealthiest of monarchs, as our Savior tells us, was not arrayed like the lily of the valley, one of the least among flowers. Though its outward robe may not be so gaudy as that of others, yet it is, and shall be through all future ages, the emblem of purity. And can we wonder then, that he, whose whole life was one of unsullied purity, should speak thus of this humble flower? Flowers, like all things else of earthly type, remain but for a short time, they open their petals to the influence of the sun and air, and having received new life and beauty, ere long they droop and die! Let us then, as we see that upon all around us is written, in characters too plain to be mistaken, "passing away," remember that we too bear the same impress and also, that

each moment as it is launched into the broad ocean of eternity, bears upon its bosom the record of every deed done in the body, and "for which we must give account in the day of judgment." Then shall those things which we now suppose known only to ourselves and our Maker, be made manifest to all men—a solemn thought! Let it teach us to be watchful over our every action in life, knowing also, that for every idle word, God will bring us into judgment.

### A Little Child Among Lunatics.

A short time ago a gentleman whose official duties required him to visit a large asylum near this city, devoted to the indigent insane, took with him a little boy some three years old; and it was an interesting study to watch the effect which the presence of the young visitor produced among the lunatics of every grade. An unusual degree of order prevailed in every hall, and touching manifestations of the softening and subduing influence of childhood were exhibited by those who were ordinarily most intractable. This was particularly the case with those who had passed the sea son of youth. One man, incurably insane, approached the little boy with a countenance for the moment full of gentleness and kindness, and with a polite gesture handed him a straw—being all he had to give—and showed great satisfaction when it was accepted, and borne as if it had been of great value. Almost all approached and shook hands with the infant and so mild was their bearing that he did not for a moment hesitate, and although abashed at what was to him an unusual crowd, he cheerfully yielded his little hand to their caresses. But the most interesting scene was in the woman's apartment. They were ready to devour him with their caresses, and yet when they observed that their crowding and volubility annoyed him, instantly withdrew a little and modulated their voices to tones of tenderness, to which they had long been strangers. One of the women, herself, a mother, inquired with tearful eyes—"Dear little fellow! is his mother living?" An affirmative answer seemed to relieve her apprehensions, and her expressions of interest assumed a more cheerful tone. The most violent, closely confined in cells, watched with intense interest every movement of the boy, and some begged, by all the affection for their own offspring—which insanity in its worst form had not eradicated—to be permitted to embrace him. The whole scene was calculated to deepen the sympathy felt for the most unfortunate class who were the object of the visit, and to show how strongly the society of children is calculated to win back to gentleness those who,

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from any cause, have passed that indefinable line which separates the sane from the insane. Such soothing effects are of course transient, but it was something to obtain for those poor vexed souls even a moment of calm delight.—  
[*New York Courier and Enquirer.*]

### Advise to Young Men.

"Study now to be wise; and in all your gettings get understanding." And especially would I urge upon your heart-bound, soul-wrapped attention, that Book upon which all feelings are concentrated, all opinions; which enlightens the judgment, while it enlists the sentiments and soothes the imagination in songs upon the heart of the "sweetest songster of Israel." That Book which gives you a faithful insight into your heart, and consecrates its shrines in

"Shrines

Such as the keen tooth of Time can never touch."

Would you know the effect of the Book upon the heart? It purifies the thoughts and sanctifies its joys; it nerves and strengthens it for sorrows and mishaps for life; and when those shall have ended, and the twilight of death is spreading its dew damp upon the last glad throb the bright and streaming light of Eternity's morning. Oh, have you ever stood beside the couch of a dying saint. and

"Without a sigh

A change of feature or a shaded smile,

He gave his hand to the stern messenger.

And as a glad child seeks his father's arms,

Went home?"

Then you have seen the concentrated influence of this Book. Would you know its name? It is the Book of Books—its author, God—its theme, Heaven, Eternity. The Bible. Read it, search it. Let it be first upon the shelves of your library, and first in the affections of your heart. Search the Scriptures, for in them ye think ye have eternal life, and they are they which testify of me. Oh! if there be a sublimity in the contemplation of God—if there be grandeur in the displays of eternity—if there be anything ennobling and purifying in the revelation of man's salvation, search the Scriptures, for they are they which testify of these things."—*Baptist Recorder.*

**FEMALE LOVELINESS.**—Female loveliness never appears to so good advantage as when set off with simplicity of dress. No artist ever decked his angels with towering feathers and gaudy jewelry; and our dear human angels, if they would make good their title to that name, should carefully avoid ornaments which properly belong to squaws and African princes. Those tinselries may serve effect on the stage or upon the bull-room floor, but in daily life there is no substitute for the charm of simplicity. A vulgar taste is not to be disguised by gold and diamonds.

### "He's Nothing but a Farmer."

Said a little Miss, a few evenings since, in a ball room, as she scornfully curled her pretty lip, on being introduced to a fine, generous, open-hearted, young fellow, whose broad and expansive forehead was the symbol of his broad acres: "He's nothing but a farmer." And who was she that looked thus disdainfully on one of God's noblemen? She was the daughter of a broken merchant, whose fortune had been ruined by the extravagance of a wife, and foolishly proud daughter. Though her father's heart had been wrong by misfortune—and he had paid the penalty of extravagance by being incarcerated in the home prepared for criminals, his daughter had not yet learnt the difference between pride and worth, extravagance and wealth. The nobleman who ate the bread of industry, and looked every man in the face, with an independence which said "I owe you nothing," was in her estimation "only a farmer!"

Did those upstart fools, who are characterized as "codfish aristocracy"—having more *smell* than substance—ever read, even their Bibles, they would find that God himself has selected his prophets and kings from among farmers. Noah was a husbandman, and planted a vineyard—Abraham was rich in cattle, and Lot had flocks and herds—insomuch that there was not pasture enough for both, and they divided the country, Lot selecting the plains of Jordan, and Abraham taking the hilly country of Canaan.

Jacob was a great cattle grower, as he presented Esau with five hundred head of cattle. Moses was a wool-grower—and Gideon was taken from his threshing floor. Saul was a herdsman, even while he was king. David was a shepherd, and was taken from that occupation to be king of Israel, and the ancestor—according to the flesh of the Messiah—Uzziah was a cattle grower. Elisha was plowing with twelve yoke of oxen (probably breaking up prairies, or turning up subsoil) when Elijah cast his mantle on him, a prophet.

And yet, though God has honored the husbandman—selected his kings and prophets from among the farmers, and even carried on agriculture on a small scale himself—(having "planted a garden eastward of Eden")—the small fry, codfish aristocracy, turn up their noses, that were never wiped with "a paid for pocket handkerchief," and cry out, "Oh, he is nothing but a farmer!"—*Ohio Farmer.*

**CURE FOR QUINCY.**—Simmer hops in vinegar a few minutes until their strength is extracted; strain the liquid, sweeten it with sugar, and give it frequently to the patient in small quantities until relieved.

## The Quaker and His Apprentice

OR, THE BEAUTY OF DOING GOOD TO THOSE WHO  
DESPITEFULLY USE YOU.

It is now twenty years since we hung upon a peg in the old New Hampshire Statesman office, at, Concord N. H., a little brown jacket and blue cap, and commenced "learning the cases." We remember that cap and jacket well. It was the best cap we had then ever owned and we remember that its visor had a green lining, which we fancied would be a great benefit to our eyes, and we remember how our mother sat up for several nights, after the other members of the family were abed to get that little brown suit ready by the day appointed for her boy to leave home and enter upon his seven years' apprenticeship. We were a little fellow then, (we are not very large now,) but we were so short then, that we had to endure the laughing of the big boys at our necessity of mounting a chair to get up at our work. But we have not sat down to write about that cap or jacket, or the experience of those seven years, or tell of the score of young men we met in that Printing Office—all now scattered, the major part already, have "passed that bourne whence no traveller returns." Peace to their ashes! But we want to tell of a couple of men, in those days, living in Concord, engaged in the book binding business. Charles H— was a man in idle life, a Quaker, and generally a very sensible and very clever man. But he was a man of intense and uncontrollable temper. When excited he wagged a saucy tongue—and sometimes dealt in blows. His best friends were not unfrequently the subjects of his violent abuse. Oliver L. S— was the other book binder. He was a young man, of not many words, but of attentive and industrious habits. For several years he had been an apprentice to the irascible Quaker—frequently subjected to his unreasonable rage, with scarcely a pretext for a cause, and was at last driven from his shop, his master emphasizing his imprecation by the flourishes of an iron press bar.

Some sixteen or seventeen years since, the Quaker moved west. A few years later, the other binder removed to the city of Portland, where he has since been extensively and successfully engaged in book and news publishing.

Day before yesterday we were in Portland, and in the counting room of his newspaper establishment met with our old acquaintance again. The conversation of course turned upon olden times, and the gentleman gave us a bit of the history of his old master since his leaving Concord. He first pitched his tent at Utica, N. Y., where in a trade he fell into the hand of a rogue, and lost all his little property.

With his interesting family, for he had a good wife and a fine troop of little ones, he pushed farther west. But misfortune kept in company, and he was reduced to extreme want. Nine years ago, his old apprentice, at Portland, heard rumor of his circumstances, and that in his extremity he had been obliged to sell his shoes from his feet to purchase bread for his children. At once like a man with a heart beneath his jacket, he forgot all about their parting, and sent his old master *one hundred and fifty dollars*. It was the act of a Christian, (alas, that our world witnesses so few of the kind and it was done in time, and it saved the man and his family. With an hundred dollars of the money the man made a purchase of a tract of rich prairie, twenty-five miles from Chicago. Not a board could be obtained nearer than Chicago—and they had not the means of buying, were lumber ever so plenty. The house consisted of a cooking stove sheltered by *three boards*. But they had the land, and kept their hearts, and bountiful crops followed their industry, and in a few years the \$150, with many blessings, found its way back to Portland.

Last year the Portland man was travelling in the west, and finding himself within a hundred and fifty miles of the home he had enabled his old master to possess, he turned off from his journey to make the family a visit. He says he found them on the most charming spot on earth he has yet seen. In the midst of one of the richest of the prairies, near a line of railway, with pleasant buildings, the sweep of wind broken by a growing forest of young locust, that during the nine years had succeeded in developing trunks whose diameters were now six and eight inches. The buildings were a little distance from the highway, and the few acres intervening he found filled with all manner of fruit trees, pleasant shrubbery and beautiful flowers. Our friend tells us that as he rode up through these beautiful grounds towards the house, he discovered his old master sitting in his door. Dismounting, the two clasped hands, but the visitor, thinking that he was not recognized, said, "You do not know me." "Yes, I do. It is Oliver!" and the old man's gushing tears choked all farther utterance. The wife heard the name, "Oliver," and she came out and the children, and not a word could any of them speak but there upon the threshold of the happy home, they all stood, shedding copious, gushing tears of joy and gratitude. What a happy meeting! And what a rich reward for that forgetting of past wrongs, and that act of kindness, which nine years before had laid the foundations of his happy and prosperous home! And what a happy world this might be, if we only had more good men in it!—*Eastern Journal.*

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### A Few words on Butter Making.

The production of Butter involves so many intricate questions of organic chemistry—so many nice physiological considerations—is influenced so much by climate, by soil, by food, and the breed, age and condition of the cows, that an essay might easily be written on the subject, while it is exceedingly difficult to say anything interesting in a single short article.

Milk contains curd, sugar of milk, and butter. The latter exists in the form of small oily globules, encased by films of curd. These globules are specifically lighter than water, so that when the milk is allowed to stand, they gradually rise to the surface, and constitute cream. When the cream is kept at a moderate temperature, the sugar, under the influence of the curd and air, is transformed into lactic acid, according to well-known chemical principles.

The object of churning is to separate the butter from the curd by which it is surrounded. This is accomplished simply by agitating the cream and breaking the films of curd, setting the oil free, which runs together and forms butter. Cream from the formation of lactic acid is generally sour before churning, and if not, always becomes so during the operation. The lactic acid acts on the films of curd, and renders them more easily broken. During the process, the cream increases in temperature from 5° to 10°. The best temperature at which to churn the cream is a disputed point. It appears, however, to be well established by numerous experiments, that 55° when the cream is put in the churn, and about 65° when the butter comes, affords the best result. If higher than this, the butter is white and soft; if lower the whole of the butter is not separated, and the labor of churning is much increased. The butter should come in from 20 to 40 minutes. If obtained quicker, it is generally at the expense of color, flavor and hardness. After the cream is "broke," it should be churned slowly till the butter is gathered.

Some good butt-makers do not wash the butter at all, merely working out the butter-milk by pressure. Where good, cool spring-water can be obtained, we should always prefer to thoroughly wash the butter, taking great pains to remove all the butter-milk. Butter generally contains about 15 per cent. of water, curd, &c. It is important for the preservation of butter that as much of this as possible should be removed. The quantity of salt required, depends upon the quantity of water in the butter. The water should be saturated with salt; hence, the less water the butter contains, the less salt will be required for its perfect preservation. When butter is

sold fresh, 15 or 20 per cent. of water is not a material objection; but when the poor city folks have to buy so much water at 15 or 25 cents per lb., do let them have it clean and fresh! Give them water, and keep the buttermilk for the hogs at home.

We need hardly say that the most scrupulous cleanliness is required in all the operations of butter making. Cream is more easily tainted by noxious gases than almost any other substance. Hence, not only must the dairy or cellar be itself clean, but all fumes from the barn-yard or out buildings be carefully excluded.—*Rochester Wool Grower and Stock Register.*

### Best Time to Plant Trees.

So much has been said and written on this subject, that there seems to be little left to say or write. I have nothing new to offer; but aim at lending "fresh interest to a twice told tale."

At the outset let it not be forgotten, that to the roots of plants, small rootlets or fibres are attached; and that all fluids for the support of the plant, have to be chiefly received through these fibres.

When a tree is transplanted, many of the fibres are broken off or damaged; and if it never has been transplanted before most of the fibres being at the ends of the principal roots, far away from the base of the tree, will be left in the ground, and very few come away with it. If the operation is performed late in the spring, the buds burst and the leaves unfold, they ask for moisture, and if the tree have an abundance of fibres, they get a fair supply; if they get few or none they wither and wilt, and no matter how carefully planted, no matter how carefully pruned, mulched or watered afterwards; nothing but extraordinary skill indeed can save them.

This is speaking of trees generally. Some trees have very spongy wood on which moisture they can subsist till the tree has had time to form new fibres. To this class belong the ailanthus, paulownia, catalpa, some poplars and willows. Others have half fleshy roots, and can draw a small amount of moisture from these for a time. The horse-chestnut, ash, lindens, many maples, and some evergreens, are of this kind. These do not suffer so certainly from the want of fibres, as the majority of trees comprising the numerous variety of oak, hickory, birch, beech, chestnut, &c.

Now, as the roots of a tree are continually forming fibres, except when actually enveloped in open soil, it directly follows that the longer we give a tree before the bursting of its buds, in which to establish itself after transplanting, the better able will it be to

meet the demands of the foliage for moisture when the warm weather comes; and this brings me at once to the pith of the subject—the *advantage of Autumn planting*. A tree planted as soon after the fall of the leaf as possible, will begin to form fibres at once, and continue to do so till spring calls the foliage into action, when the roots will be able to meet any ordinary demand made on them; at any rate it has a better chance than that same tree would have if planted in spring.

I do not deny that spring planting has many favorable points of view. In my recent work on trees, I have freely granted this; and I would even here go so far with its advocates, as to admit that in some cases and *skillful hands*, trees can be made to do better when planted early in the spring, than in the fall; but as a *general rule*, and in *general hands*, and for the reason I have given, autumn is the safest, and in many cases the only safe time in which to remove trees.

I am aware that the advice from a nurseryman often loses much of its weight through his being supposed to be interested; and in the present case I am free to confess that I have an interest in the advice I have given. It is unpleasant to have one's customers come when the trees are actually in leaf, with 'we bought some trees of — last season, but they died; we want to see if yours will do better.' Is it not, Mr. Freas, enough to make any man look 'wide awake,' when his reputation hangs on such slender threads; and need he blush to avow interested motives in taking every opportunity to diffuse sound practical information? THOS. MEEHAN.

Germanatown, Ohio, June 13, 1854.

Weak, Nervous, Depressed in Spirits, and a prey to innumerable mental as well as physical evils, the victim of dyspepsia is indeed an object of commiseration. Yet it is absurd for him to despair. We care not how weak, how low, nervous and irritable he may be, the cordial properties of Hoofland's German Bitters, prepared by Dr. C. M. Jackson, Philadelphia, are stronger than the many headed monster which is praying upon his body and mind; and if he chooses to try them, we will insure him a speedy cure.

In the late fire at San Francisco, we notice a large quantity of Ayer's Cherry Pectoral burned, in the possession of one of the Druggists of that city. Gold will not control diseases, and even in that Opfir country they must provide this best of remedies for colds, coughs and affections of the lungs. Indeed, we happen to know that it is an almost indispensable companion of the mulateers and miners, who are so much and so continually ex-

posed to the ever changing atmosphere of that climate.

### St. Louis Market—Wholesale. Saturday, Sept. 3, 1854.

HEMP—\$1200@1300 per ton, Heckled \$2000@2200.  
FLOUR—7 bbl. good country brand, \$7 00@7 75 extra brands, \$8 00; extra country and city \$6 50@7 00.  
WHEAT—7 bushel, good to prime, \$1 25@1 40.  
CORN—7 bushel \$1 00@1 10; sacks included.  
OATS—7 bushel, 27@35 cents, sacks included.  
BARLEY—7 bushel, \$1 05 cents.  
MESS PORK—7 bbl., \$10.75.  
PICKLED HAMS—7 lb., 5X cents.  
LARD—7 lb., No. 1 8 cents.  
SUGAR—7 lb., common, 4@5 cents.  
MOLASSES—7 gallon, 17 cents.  
COFFEE—7 lb., Rio, 6@10 cents.  
PIG IRON—7 ton, cold blast \$450@460.  
HAY—7 100 lbs. timothy, 80 cents@82.  
BRAN—30 cents 7 100 lbs.  
SALT—7 sack, G. A., \$3.10, Kanahwa, 50c 7 bushel.  
BUTTER AND CHEESE—Fair country butter, 8@10 cts. good to prime, 11@13c; choice. Ohio roll, 18@17c. W. E. cheese 8@10c for prime.  
DRIED FRUIT—Apples \$1; peaches, \$1.15@1.25 7 bushel.  
GREEN APPLES—50@75 7 bushel.  
POTATOES—7 bushel, new, 60 cents.  
FLAX SEED—7 bushel \$1.

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J. J. DONEGAN.

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VOLUME TEN OF THE "SCIENTIFIC AMERICAN" commences on the 16th of September. It is chiefly devoted to the advancement of the interests of *Mechanics, Inventors, Manufacturers and Farmers*, and is edited by men practically skilled in the arts and sciences. Probably no other Journal of the same kind is so extensively circulated, or so generally esteemed for its practical ability. Nearly all the *Valuable Patents* which issue weekly from the PATENT OFFICE are illustrated with *Engravings*, and the claims of the Patents are published regularly in its columns as they are issued, thus making it a perfect SCIENTIFIC AND MECHANICAL ENCYCLOPEDIA of information upon the subjects of *Mechanical Improvements, Chemistry, Engineering* and the *Sciences* generally. It is published weekly in quarto form suitable for binding, and each volume contains FOUR HUNDRED AND SIXTEEN PAGES of Reading Matter, SEVERAL HUNDRED ENGRAVINGS, with a full and complete Index. Its circulation on the last Volume exceeded 23,000 copies per week, and the practical receipts in one volume are worth to any family much more than the subscription price.

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## DAVIS & PENNOCK'S Patent Grain Planter

MANUFACTURED BY

J. B. RENTCHLER, Belleville, Ill.

The attention of the wheat growers of the West is respectfully solicited to the above implement. Several hundred of these machines were sold last season and we have no hesitation in saying that they gave the best satisfaction. It will neither injure nor waste the grain, nor is it liable to choke with white caps or straws. It is unsurpassed for general simplicity, durability, lightness of draft and weight on the horse's necks; also for the facility and precision with which it is regulated to seed any desired quantity per acre.

This Machine operates well on all kinds of land, and is not injured by coming in contact with rocks, roots, &c.—It will plant point rows and all irregular shaped fields, without sowing any part twice over. With a saving of 10 to 15 per cent. in labor; it will with ease plant from 10 to 12 acres per day of Wheat, Oats, Barley and other small grains.

It will save from 2 to 3 pecks of seed per acre, and yield from 15 to 20 per cent. more than the broad cast seeding, by distributing the grain uniformly at any desired depths, and leaving a ridge of earth between the rows, the roots of the young plants are protected during the winter by the action of the frost and rain moulder the earth upon them, instead of being thrown out and exposed as in broadcast. On this account the stalk is strong and less subject to mildew, and is not so liable to injury by the fly.

The farmer is frequently prevented by rain from harrowing his grain after it is sown, which harrowing is needless in seeding with this machine as it completes it at once.

This machine has been very much improved the present season, and is offered to the farmers of the West, who will find it equal to any grain drill in use. The price is \$80 on purchasing the machine or \$36 payable six months thereafter with interest.

LEBANON, St. Clair Co. Aug. 21, 1854.

Mr. J. B. RENTCHLER, Dear Sir:—I have used your Wheat Drilling Machine, Pennock's improved patent of 1853, and put in 104 acres. I had one year before of a different kind and found it would not answer. I have used several different kinds of drills and find yours to be the best I ever saw. The great advantages it possesses over other machines are its great simplicity, and the ease with which it is regulated, as to the quantity of seed to the acre, and the depth of deposit, and its adaption to sowing irregular shaped fields, and its security against damage to the event of coming in contact with roots, stumps, &c.

D. & W. BITZER.

RIDGE PRAIRIE, Aug. 13th, 1854.

This is to certify that I have used Pennock's Patent Wheat or grain Planter, and it gives me pleasure to state that I believe it to be the best machine for the purpose intended that is now in use, and that I can recommend it to the farming community as one of the most economical and perfect agricultural implements with which I am acquainted, and am convinced by experiment that it is a great saving of labor and seed, and is particularly adapted to flat prairie land which is liable to throw out by frost and be winter killed. One of my neighbors put in a field of wheat in the old broad cast system. I also put in a field of wheat with the Drill of the same kind of wheat as his, the lands of the same quality and in the same state of cultivation, and most excellently prepared for sowing; he realized 14 bushels of wheat to the acre and mine turned out 22 bushels to the acre.

Yours, &c.

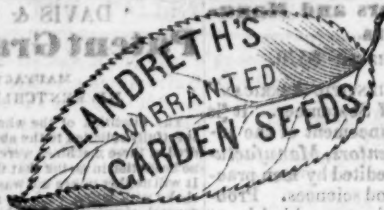
ELIJAH BADGLEY.

At the World's Fair, held in the New York Crystal Palace, a Bronze Medal, with special approbation, as first and highest Premium on Drills, was awarded to Pennock's Grain Planter. It has also received the First Premium from numerous State and county Agricultural Societies.

The undersigned having been appointed agent for the above machine in St. Louis will keep a supply on hand during the season, and all persons wishing to purchase are respectfully invited to call on him and examine for themselves.

At the Valley Farmer Office, Old Post Office Building, Chesnut street between 3d and 4th.

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**GEO. BURNET, Jr.**

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